

In the Matter of: )  
 )  
Informational Proceedings and )  
Preparation of the 2003 ) Docket No.  
Integrated Energy Policy Report) 02-IEP-01  
 )

TUESDAY, FEBRUARY 25, 2003

10:00 A.M.

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

COMMISSIONERS PRESENT

James Boyd, Presiding Member

William J. Keese, Associate Member

ADVISORS

Scott Tomashefsky, Advisor

Susan Bakker, Advisor

Melissa Jones, Advisor

STAFF PRESENT

Al Alvarado

Lynn Marshall

Ruben Tavares

Helen Sabet

David Abelson

Bill Wood

David Vidaver

ALSO PRESENT

Loren Lutzenhiser, Associate Professor  
Portland State University

Richard Aslin, Team Leader  
Pacific Gas and Electric Company

Tim S. Vonder, Senior Economic Analyst and  
Forecaster  
San Diego Gas and Electric

Mark J. Skowronski  
Duke Solar

ALSO PRESENT

Robert W. Sparks, Senior Grid Planning Engineer  
California Independent System Operator

Steven Kelly, Policy Director  
Independent Energy Producers Association

Chuck Waitman, Energy Engineer  
Tesoro Refining and Marketing Company

David L. Arthur, Energy Supply & Marketing  
Redding Electric Utility

Gary L. Schoonyan, Director  
Southern California Edison Company

Devra Bachrach, Project Scientist  
Natural Resources Defense Council

Tracy Saville, Vice President  
RealEnergy

J.A. Savage, Senior Correspondent  
Energy NewsData

Maryam Ebke, Regulatory Analyst  
California Public Utilities Commission

Brian C. Prusnek, Regulatory Analyst  
California Public Utilities Commission

Don Schultz, Senior Analyst  
California Office of Ratepayer Advocates

Jeff Nahigian  
JBS Energy

Michael S. Alexander, Manager  
Southern California Edison Company

Ted Mureau  
Southern California Edison Company

Rick Codina, Principal Rate Analyst  
Sacramento Municipal Utility District

Jerry Jordan, Executive Director  
California Municipal Utilities Association

ALSO PRESENT

Joseph Kloberdanz, Manager  
San Diego Gas and Electric Company,  
Southern California Gas Company, Sempra Energy

Kurt J. Kammerer, Director  
San Diego Regional Energy Office

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## P R O C E E D I N G S

10:00 a.m.

PRESIDING MEMBER BOYD: Okay, I think the appointed hour having come and past, we should get started. I'd like to welcome everybody to the Integrated Energy Policy Committee's workshop today. Today's workshop, which although it's not our first on the subject of the Integrated Energy Policy report, we hope -- we know it's the first in a series of workshops to discuss California's energy infrastructure and all that entails, infrastructure concerns and other types of concerns for consideration in development of the Commission's coming policy reports.

I think, as everyone knows by now, having read all the materials that have been available for months now, the Commission's preparing an Integrated Energy Policy report and will have recommendations in the most current and pressing energy trends and issues of concern to the State of California.

As you will recall in September of last year the Commission initiated an informational proceeding, created an ad hoc committee, which you see sitting up here, to lead the proceedings and

1 accomplish our overall purposes of collecting and  
2 analyzing information and ultimately preparing the  
3 required report.

4 The ad hoc committee consists of myself,  
5 Jim Boyd, and Commissioner Keese. And we're  
6 hoping to have a very interesting and successful  
7 workshop today.

8 The Integrated Energy Policy report that  
9 we're aiming to prepare will focus on an overview  
10 of major energy trends and issues facing this  
11 state including, but not limited to, the  
12 following: supply, demand, pricing, reliability,  
13 efficiency and impacts on public health and  
14 safety, our economy, our resources and our  
15 California environment.

16 The report will develop both near- and  
17 long-term objectives and strategies and recommend  
18 policy initiatives to the Governor and the  
19 Legislature on all the cross-cutting energy issues  
20 that are defined in this process.

21 As discussed in all the materials that  
22 have been available about this activity this  
23 report will consist of an integrated energy  
24 summary and three subsidiary volumes: electricity  
25 and natural gas being one; a second on

1 transportation fuels; and a third integrated  
2 volume on Public Interest Energy strategies,  
3 market technologies and infrastructure.

4 This Commission will prepare these  
5 reports in consultation with appropriate state and  
6 federal agencies. And specifically the state  
7 agencies that we are working with, and we delight  
8 in their participation in this activity, are the  
9 Public Utilities Commission, the Office of  
10 Ratepayers Advocates, the State's Air Resources  
11 Board, the Electricity Oversight Board, the  
12 Independent System Operator, the Department of  
13 Water Resources, the California Power Authority,  
14 and the Departments of Transportation and Motor  
15 Vehicles.

16 The Commission Staff has been, and will  
17 continue to be, in contact with these agencies for  
18 development and review of all the studies in  
19 support of this activity, which I will henceforth  
20 call IPER, instead of saying Integrated Energy  
21 Policy report every time the subject comes up.

22 I think those of you who have followed  
23 this subject know that this Committee held its  
24 first hearing on October 22nd to take public  
25 comments, and propose a scope of topics that the

1 Commission should cover in this IPER.

2 The Committee is grateful for the  
3 thoughtful input we've received, and will continue  
4 to be guided by and consider all the comments we  
5 receive as these proceedings move forward.

6 There are many many topic areas that  
7 have been proposed for this proceeding, and will  
8 be quite a task for all of us to assimilate and  
9 deal with.

10 The Committee intends to focus the  
11 subject matter of this first activity, or this  
12 first report we owe this November, fairly  
13 selectively as opposed to being, you know, very  
14 expansive. Or if there's such a word,  
15 expansively.

16 Focus on the more important energy  
17 issues that California will likely be confronting  
18 in the next decade is, I think, a principal  
19 objective. We'll also focus on analyses that will  
20 be relevant to the energy-related proceedings that  
21 other state agencies are conducting. And I think  
22 energy agencies have reached the highest state of  
23 interactive coordination that I've ever seen in  
24 the last year or so. And so we look to help each  
25 other out in all the various responsibilities we

1 have.

2 We are focusing, admittedly, on what can  
3 be adequately accomplished within the mandated  
4 schedule of submitting a report to the Governor  
5 and Legislature by November of this year. A very  
6 tall order.

7 The Committee released a scoping order  
8 on December 16th of last year that established the  
9 focus for this IPER, and it emphasized the need to  
10 maintain a strong energy infrastructure.

11 It's intended to insure that  
12 policymakers receive a comprehensive assessment of  
13 short-term and long-term issues that are likely to  
14 be of greatest concern. That will come November  
15 of this year.

16 California's growing population and  
17 economy certainly drive an increasing demand for  
18 all forms of energy; as I like to say, energy  
19 fuels the engines that powers the California  
20 economy.

21 Events of the last three-plus years have  
22 exposed a host of vulnerabilities for this state's  
23 energy system, and I don't mean just electricity.  
24 A pressing issue to us is to determine whether  
25 these vulnerabilities are still a concern, or

1       whether administrative, legislative, regulatory  
2       and private sector actions to date, in response to  
3       these events, have addressed some or all of these  
4       vulnerabilities. And that's the purpose of these  
5       public discussions, to ascertain where we are.

6               The state faces numerous uncertainties  
7       that affect our energy infrastructure. Just to  
8       name a few, the regulatory design underlying the  
9       electricity market yet to be disposed of. The  
10      financial condition of many, if not most, of the  
11      country's energy companies. The quantity and  
12      quality of energy supplies available to  
13      California. And the prospects for the timely  
14      acquisition of needed energy infrastructure. Just  
15      a few problems that we collectively face.

16             To insure a strong energy infrastructure  
17      we need an understanding of the risks and the  
18      uncertainties we face, and we need to have  
19      sufficient information to assess the tradeoffs  
20      between costs, environmental quality and  
21      reliability.

22             The scoping order directed the  
23      Commission Staff to complete foundational work to  
24      support further development of this report. It  
25      said, in short order, staff shall prepare baseline

1 forecasts of energy demand, supply and price.  
2 Staff shall also clearly document the underlying  
3 assumptions of those forecasts, which leads us to  
4 today's workshop, or the workshops of today and  
5 tomorrow.

6 Staff has prepared a number of draft  
7 reports that include preliminary demand and price,  
8 and to some degree, price of supply assessments.  
9 Staff is also proposing some scenarios to analyze  
10 different types of uncertainties that may affect  
11 energy infrastructure concerns. These studies  
12 will be used for comparing one of the three  
13 subsidiary integrated energy policy reports,  
14 namely the electricity and natural gas report.

15 Given the good number of participants we  
16 have here today I hope there will be a lively  
17 discussion that you will provide technical  
18 comments to help guide the next series of staff  
19 studies.

20 We're going to try to confine today's  
21 comments to the technical materials that have been  
22 provided in these several draft reports, and those  
23 issues relative to advance these staff studies  
24 that I mentioned, and defer in-depth policy  
25 discussions to future proceedings that deal with

1 policy issues. But I don't want to shut the door  
2 on policy issues that have been raised in these  
3 kind of basic data reports.

4 Well, with that, and before we pass the  
5 program on to Al Alvarado, the Project Manager,  
6 I'd like to turn the microphone over to  
7 Commissioner Keese to see if he has any additional  
8 comments that he'd like to make on today's  
9 proceedings.

10 CHAIRMAN KEESE: I'd like to just  
11 welcome everybody here. We're happy that you're  
12 joining us. We're not happy that we can't have a  
13 different arrangement for what turns out to be a  
14 formal Commission room here, and that we're up  
15 here, not down there, because we'd like to do this  
16 together.

17 As we see it, the primary responsibility  
18 of doing the underlying work here and giving you  
19 something to look at, and Jim and I, as the  
20 Committee, with staff, Karen Griffin leading up  
21 the team, putting together reports that we can  
22 then analyze. We don't have to do all the work on  
23 them; they'll put them forward.

24 But the results of these early days of  
25 hearings is that we have to agree on what the

1 baseline is, where we're going. And then when we  
2 move to the policy phase, it's going to require  
3 all of us, and that's the agencies that  
4 Commissioner Boyd listed, and the community at  
5 large, the business community, the oil industry,  
6 the electric industry, to sit down with us and  
7 decide what are those priorities.

8 Everyone who represents a specific  
9 interest in this room can list two or three of  
10 their prime issues that they think for their  
11 constituencies are the most important issues that  
12 should be put forward.

13 We cannot wind up at the end of this  
14 process with 100 key issues that the Governor and  
15 the Legislature should focus on in the next couple  
16 of years. In my mind, we're going to set 95 of  
17 them aside and say, we'll deal with that when we  
18 do our second one in 2005, and our third one in  
19 2007 -- and somebody else does a third one in  
20 2007.

21 But, we're going to have to come up with  
22 five, six or seven key issues that are the most  
23 important that this Governor and this Legislature  
24 should understand. And that's going to require  
25 the agencies with a common baseline, industry and

1 business with a common understanding of baseline  
2 to get together and say, these are the ones that  
3 rise to the top that all of us concur on are  
4 important.

5 That requires everybody participating  
6 here. Again, as I've said, Karen Griffin and team  
7 are doing the baseline work. We hope that the  
8 work will be good enough that you can look at it  
9 and help us tweak it. We'll all agree on it.

10 Then for the final sessions we really  
11 want to be sitting at a roundtable and have all of  
12 us sitting there on an equal footing and coming up  
13 with what we're going to send to the Governor.

14 The dynamics of this process are  
15 different than those around the country. New York  
16 has done a plan like this. Other major states  
17 have done plans like this. They're generally top-  
18 down. They're commissioned from the secretary of  
19 some agency or an entity like energy -- just give  
20 it to us and then we'll tell you what we think.

21 This one is really coming up the other  
22 way. It's for all of us to sit down, come up with  
23 what we think is right, and send it up to the top.

24 So, excuse us for sitting up here and  
25 making it look a little formal. We'd like this to

1 be just as informal as possible. With that, again  
2 I welcome you and turn it over to staff.

3 MR. ALVARADO: Okay. Good morning.  
4 Welcome to this first of what will be a series of  
5 public workshops for the development of the  
6 Integrated Energy Policy report. My name's Al  
7 Alvarado. I am the Project Manager of the  
8 Electricity and Natural Gas Report, one of the  
9 three subsidiary reports that Commissioner Boyd  
10 had mentioned.

11 PRESIDING MEMBER BOYD: Al, you're going  
12 to have to speak up.

13 MR. ALVARADO: Okay, will do. This  
14 workshop will focus on five staff draft reports  
15 that were released a couple weeks ago. These  
16 reports are the first of a number of staff studies  
17 that we're conducting to analyze potential energy  
18 infrastructure concerns.

19 These reports, these five reports that  
20 were released, will be discussed, and will be  
21 discussed today, will lead towards the development  
22 of the electricity and natural gas report.

23 These reports present the staff's  
24 preliminary assessment of supply, demand and  
25 price. And will serve as the foundation for

1 analyzing the implications of potential  
2 uncertainties and their associated risks.

3 Staff are proposing to analyze a number  
4 of difference scenarios that are intended to  
5 capture a range of potential uncertainties. For  
6 example, we will be examining a range of factors  
7 that may affect energy demand, such as possibly  
8 the rebound of the economy.

9 The energy demand scenarios will then be  
10 used to examine different resource development  
11 proposals and their implications for needed  
12 transmission, natural gas pipeline or storage  
13 investments.

14 Staff will continue their studies over  
15 the next several months and will be presenting the  
16 results for further public comment. These studies  
17 will then provide the foundation for preparing the  
18 draft electricity and natural gas report which is  
19 expected to be released sometime late July.

20 We are interested in hearing your views  
21 and your perspectives on the subject matter of  
22 these five reports today and tomorrow. So, as the  
23 Commissioners indicated, you know, I encourage you  
24 to come speak up and contribute to this  
25 discussion.

1           We are transcribing this workshop today,  
2           and not so much as a matter of formality, but  
3           rather to help us track your comments, so since it  
4           is being transcribed, please come up to the  
5           microphone and identify yourself for the record.

6           So, I do hope that we can have a good  
7           lively discussion. This opportunity is for us to  
8           hear what you have to say and comment on the staff  
9           reports.

10          We are open for additional -- any  
11          comments, but I would like to limit the comment  
12          period, at least for this five set of reports, to  
13          this Friday. So if you do have any other  
14          additional comments, please submit them to me. We  
15          are working on a really tight schedule, so  
16          immediately, based on once we sort of digest the  
17          comments we receive today, we're going to be  
18          cranking away and conducting some of our  
19          simulation studies, and be releasing the next  
20          series of other staff reports for your comment.

21          So, with that being said, I will pass it  
22          on to Lynn Marshall. Lynn Marshall's responsible  
23          for the first of the reports we're going to be  
24          discussing today on demand.

25          MS. MARSHALL: Okay, this morning I'm

1 going to briefly discuss, give an overview of the  
2 results of our draft electricity and natural gas  
3 demand forecasts. We'll talk a little bit about  
4 the key inputs to those forecasts, which are  
5 primarily the energy prices, the economic  
6 assumptions that go into the forecast, and the  
7 conservation and, in particular, how voluntary  
8 conservation that we saw in 2001 is playing out  
9 currently and in this forecast.

10 This is an overview of the forecast  
11 inputs. Our economic drivers are --

12 UNIDENTIFIED SPEAKER: Excuse me, can  
13 you speak up? It's really hard to hear you.

14 CHAIRMAN KEESE: You have to get real  
15 close to the microphone; one or two inches, and it  
16 works.

17 MS. MARSHALL: Okay. The economic  
18 forecast we're using were based on the UCLA  
19 Anderson School of Business assumes a modest  
20 recovery beginning in 2004. Our rate structure,  
21 the rate forecast will talk more about this  
22 afternoon, but we're not addressing any possible  
23 implications of future strategies to increase  
24 demand responsiveness.

25 There's very modest increase in private

1 supply or self generation. We have, in the last  
2 couple of years, seen a notable increase in that  
3 area, but we're not assuming that that continues  
4 at this point.

5 While the forecast takes into account  
6 energy efficiency savings from programs that have  
7 been funded through 2002, we haven't made any  
8 assumptions about what will happen in particular  
9 with the utilities public good charge programs  
10 beginning in 2003. So that's an area in  
11 particular where we'd like your input on how that  
12 ought to be accounted for, both in the basecase  
13 and in scenarios.

14 And finally, we'll talk about the  
15 voluntary conservation issue.

16 So this shows our basic energy  
17 consumption forecast. This forecast is slightly  
18 lower, about 1, 1.5 percent lower than the  
19 California energy demand 2002 forecast. Primarily  
20 because of lower economic projections.

21 You can clearly pick out 2001 there, the  
22 big drop of about 3.8 percent. And you can see,  
23 while overall demand grows at about 2 percent a  
24 year, we have a 2004 to '6 growing at almost 3  
25 percent a year, and that's a function both of the

1 economic rebound and effects of decreasing  
2 electricity prices in 2004.

3 And here is the statewide peak demand  
4 forecast. Again, this forecast is even lower.  
5 This is about, oh, about 4 percent lower than our  
6 previous forecast. Again, increasing more than 2  
7 percent in the 2004 to '6 timeframe, and a modest  
8 increase of about less than 2 percent a year for  
9 the remainder of the forecast.

10 This gives a little more detail by the  
11 utility planning area, the geographic level at  
12 which we forecast. And you can see on the peak  
13 side much larger decrease. In 2001 we had roughly  
14 6 to 8 percent drop in peak. You can see in 2002  
15 we had quite a bit of rebound, some -- this is not  
16 weather-adjusted, so some of that reflects warmer  
17 weathers, particularly in SMUD, and in, I think,  
18 San Diego. But even accounting for that we've had  
19 quite a bit of rebound in 2002.

20 Going out and looking at the forecast  
21 years we have faster growth in San Diego and  
22 Edison, in particular, more than 2 percent per  
23 year.

24 Briefly, our natural gas forecast. This  
25 is overall growing over the forecast period at

1 less than 1 percent a year, about .8 percent.  
2 It's higher in San Diego, by about 1.5 percent;  
3 PG&E, in particular, has the lowest forecast, only  
4 about .5 percent on average over the next ten  
5 years. And that's primarily driven by almost flat  
6 industrial demand. And that's a function of the  
7 increasing natural gas prices.

8           Going to some of the forecast drivers, I  
9 only touch briefly on the electricity rates  
10 because we will talk more about that in the  
11 afternoon. But I want to point out what is most  
12 significant for this forecast is 2004, the  
13 procurement obligations are retired, and we see 20  
14 percent price decreases and Edison and PG&E, I  
15 think about 8 percent in San Diego. So that has a  
16 notable effect on the forecast, particularly in  
17 the nonres sector.

18           Economic drivers and demographic. We  
19 fundamentally are population, employment and  
20 personal income. So, what this chart shows is the  
21 relationship between electricity consumption and  
22 employment. And this is historical, going from  
23 about 1980 to 2000. And you can see generally  
24 tracks pretty well. We had decreases in both  
25 employment and consumption in the early '80s and

1 early '70s during the recession periods. Late  
2 '90s they're both increasing upwards of 3 percent.

3 And so looking at our forecast you can  
4 see we have, again, that same relationship. But a  
5 fairly modest recovery compared to some of the  
6 historical data increasing at, oh, around more  
7 than 2 percent in the early part of the forecast,  
8 and decreasing after that.

9 So while we have -- this shows, the pink  
10 line is kilowatt hours per job. And the  
11 increasing line is kilowatt hours per capita. So  
12 while we have a constant relationship on the  
13 employment side, we have increasing per capita  
14 consumption. And that's really a function of the  
15 personal income forecast we're using.

16 After a couple of decreases in 2001 and  
17 '2, we have pretty strong growth, over 3.5  
18 percent, in the middle part of the forecast  
19 period. So that is affecting the residential  
20 forecast and driving up consumption, per capita  
21 consumption.

22 Now, to deal with the issue of to what  
23 extent is voluntary conservation still persisting,  
24 and to what extent is it accounted for in our  
25 forecast. We have been tracking peak demand in

1       trying to assess this question on the peak side.  
2       We think probably about a third to a half is  
3       persisting. And looking at our forecast, in  
4       particular in the res and commercial side, these  
5       are long-run models that are calibrated for long-  
6       run trends, so we think our forecasts are  
7       generally consistent with the amount of rebound  
8       that is occurring.

9               And this shows, you can see the top --  
10       this shows a moving average of how much  
11       conservation we have relative to 2000. So, if you  
12       look at July 2001 through the peak of the energy  
13       crisis, 10 to 12 percent, consumption was 10 to 12  
14       percent lower than the same period in July 2000.  
15       Pretty significant conservation.

16              As we get to winter, early January, not  
17       surprising it decreases, but then again last  
18       summer we still saw nowhere near the amounts of  
19       the summer of 2001, but it's still significant.  
20       So there is some, definitely some behavioral and  
21       permanent savings from that effect.

22              Looking at it another way, this shows  
23       compares July for the last three summers. The top  
24       line, daily peaks just for weekdays and the ISO.  
25       The bottom red line shows the relative

1 temperature, how hot it is relative to normal.

2 So, above that line it's hotter than  
3 normal; below that line it's cooler than normal.  
4 And if you look comparing July 2000 to 2001, it's  
5 pretty obvious that, yes, peak was, even taking  
6 into account weather differences, peak was notably  
7 lower.

8 In 2002, if you look at the latter half  
9 of July, maybe we had similar weather, we  
10 definitely see some rebound there, but we don't  
11 think not completely to the levels that demand  
12 would have -- that we would have had compared to  
13 2000 if we had not had the effects of the energy  
14 crisis.

15 On the energy side this is not weather-  
16 adjusted data, but this is our actual data for  
17 2001. And it shows, by sector, which sectors were  
18 conserving. So in the residential sector it's  
19 fairly consistent across planning areas, 3 to 5  
20 percent; more than that in Edison.

21 Industrial sector, a lot of big  
22 differences. San Diego much large, not  
23 surprisingly they have the earliest rate  
24 increases.

25 And then commercial sector, again,

1 modest, but generally across the board reduction  
2 in energy consumption.

3 And at this point I'm going to stop and  
4 let Loren Lutzenhiser talk about some of the  
5 research he's doing on the extent to which  
6 voluntary conservation is persisting. And then  
7 we'll come back and talk about our scenarios.

8 DR. LUTZENHISER: Thanks very much.  
9 This projector has pretty awful ghosting on it,  
10 but it's better on the screen there, and I assume  
11 the Commissioners' screen, as well.

12 I'm Loren Lutzenhiser, Washington State  
13 University and Portland State University. I've  
14 been studying the behavioral response to the  
15 events of the summer of 2001 for the efficiency  
16 division for the last two years. It's part of a  
17 larger project that was imagined there was  
18 something that might be said about what we're  
19 learning about behavioral response in terms of  
20 what people are doing, why they're doing it, and  
21 so on, that would be of use in this deliberation,  
22 as well.

23 There is a long story here, and I have  
24 about ten minutes, so I'm not going to tell the  
25 long story.

1           Briefly, among a number of other pieces  
2           or a variety of pieces of this project we've  
3           conducted two waves of surveys with residential  
4           consumers in California. The first in the fall of  
5           2001. The sample size is about 1600 households  
6           representing the five major utilities and sampled  
7           in such a way as to be able to make some  
8           reasonably statistically defensible comparisons  
9           between them.

10           The second survey wave was completed  
11           this last fall. The sample size is something over  
12           800 cases, similarly distributed across the  
13           utilities.

14           We've looked carefully at the behavioral  
15           response and self reports of behavior, motivation,  
16           effects of motivators on people. We've had some  
17           cooperation from the utilities to be able to match  
18           with the survey data, actual household billing  
19           data so we can say something about actual  
20           effects.           No peak information, only energy  
21           information, on a monthly basis.

22           So we've collected this back to 1999 in  
23           most households and are in the process of asking  
24           the utilities to update that now for us for the  
25           last year.

1           Utilities have also supplied samples of  
2   5000 randomly selected households, separate  
3   sample, and we've been able to do weather and  
4   consumption analysis with these households to say  
5   something about the change in consumption.

6           For all these analyses appropriate  
7   weighting was done to take into account biases in  
8   these sorts of data collection efforts. So, for  
9   example, when I show you the survey results  
10   they'll be weighted for each utility territory by  
11   ethnic distribution, by home ownership and by  
12   housing type. So we feel fairly confident that  
13   we've got a fairly representative picture.

14           In the first --

15           CHAIRMAN KEESE: Let me --

16           DR. LUTZENHISER: Yes.

17           CHAIRMAN KEESE: Do you have a hard  
18   copy? I don't know if you happen to have a hard  
19   copy. A hard copy will not have a shadow and the  
20   audience will be able to see it, I believe.

21           DR. LUTZENHISER: Okay. That'd be good.

22           (Pause.)

23           DR. LUTZENHISER: It will be black and  
24   white, but it will be -- it still shadows, but  
25   that's -- we can work with that.

1           Okay, what we see here are simply  
2   numbers of conservation actions on average  
3   households in the first survey reported doing 2.4  
4   things. What's interesting here is that a clear  
5   majority, over 70 percent, reported doing  
6   something. And these were self reports about what  
7   it was that people were doing. And we were able  
8   to classify those.

9           The behaviors on the left are sort of  
10  simple ones involving shutting off lights, turning  
11  off equipment when not in use, things of this  
12  sort. The bar in the middle -- this is terrible  
13  because I'm sort of tethered to this microphone,  
14  but I can't read the screen.

15          This bar here is the one we think is of  
16  some significance, because this involves these two  
17  adjacent ones. One is a self report that people  
18  were adjusting their thermostats during the summer  
19  at higher levels to use less cooling, which was  
20  the official message given. The second and much  
21  taller, that's a short bar -- the second and much  
22  taller bar are people's self reports that they  
23  quit using air conditioning all together, or used  
24  it very very sparingly, which we found somewhat  
25  surprising.

1           And then the behaviors on the far right,  
2   the three bars are actual low cost, medium cost,  
3   high cost purchases of energy efficient equipment  
4   or major housing retrofits and these sorts of  
5   things.

6           Did this have any effect? Well, we've  
7   seen in the aggregate values that it has. And  
8   I'll just say quickly that we performed an  
9   analysis on these 5000 case samples and basically  
10   plotted, these would be just sort of a graphical  
11   representation of plotting the actual relationship  
12   between temperature and consumption for each  
13   household in the pre- and post-crisis periods.

14          And then we can take a look at the  
15   difference in these slopes; the slopes on the  
16   right are shallower, okay.

17          And what we found, in effect, was that  
18   if, in the pre-crisis period the average effect of  
19   1 degree of temperature over 65 degrees, one  
20   cooling degree day, is .99 in the PG&E case; is  
21   .99 kilowatt hours. In the post-crisis period we  
22   see fairly dramatic declines in each of these  
23   cases.

24          What this says to us is that the actual  
25   structure of the relationship in the household

1 sector between temperature and consumption, the  
2 cooling effect changed in a significant way in  
3 2001.

4 Okay. So, we talked to folks again in  
5 2002 and asked them if they were continuing to do  
6 the same kinds of things that they had done  
7 before. In fact, we said, in your own words tell  
8 us what you're doing.

9 And in fact, I was very very surprised.  
10 And these are weighted results, again, in each  
11 case. And this is the sample of people who  
12 reported taking conservation action or continuing  
13 to conserve in 2002. And the dropoff in terms of  
14 self reports of behavior are not large. In fact,  
15 there's actually a little over-reporting of this  
16 non air conditioning use going on. Now, these are  
17 sort of early results and it'll be interesting  
18 then to see how this is reflected in actual energy  
19 consumption.

20 Very quickly, we also asked people if  
21 they were doing anything that was new. And, in  
22 fact, they reported, you know, 20 percent of the  
23 households reported doing something, continued  
24 doing something related to energy and  
25 conservation. These are percents of the total

1 sample. Again, these are sort of modest behaviors  
2 in most case, but supplies some evidence of  
3 continued actual behavior.

4 We also asked if they had discontinued  
5 what they had been doing before, and if so, what  
6 that might conceivably be. And I guess it's no  
7 surprise that, you know, about 8 percent of the  
8 sample -- well, I guess that is sort of a surprise  
9 to me -- would say that they were, in fact, not  
10 hanging their clothes out on lines anymore, or  
11 were not paying as much attention to shutting  
12 lights off, or turning the pool pump back on, or  
13 you know, letting the thermostat be set at a lower  
14 setting or something of that sort.

15 Okay, there's a lot of appliance  
16 purchase going on here, which is pretty  
17 interesting. I think 28 percent, the  
18 refrigerators, and refrigerators 24 percent  
19 washers and dryers. The question was what have  
20 you purchased in the last two years.

21 Did people take energy into account? Is  
22 that a significant thing? And I think fairly  
23 clearly it is in many cases. Whatever the message  
24 is from advertising, appliance labels and so on  
25 and so forth, and we have other batteries of

1 questions sort of asking people what they took  
2 into account and how they weighted it and these  
3 kinds of things. They are attentive to energy as  
4 a continuing issue when making these kind of  
5 purchases.

6 But is this going to hold up in the  
7 future? Well, I mean we don't have a crystal  
8 ball, but we can ask about these content kind of  
9 questions that the Commission was introducing  
10 earlier, kinds of issues that the state is facing  
11 and will face that are persistent.

12 And so we asked people what their views  
13 were of the seriousness. Are these serious or not  
14 so serious issues or concerns about energy in the  
15 future.

16 And I think we get what strikes me as  
17 intuitively, at least, honest responses. Saying,  
18 well, okay, shortages of imports, yeah, well, I  
19 don't even know what that is, say some people.  
20 And that's a truly honest response.

21 Transmission constraints they've heard  
22 of. Energy crisis and so on, but I thought that  
23 air pollution and global warming were actually  
24 fairly interesting.

25 Well, what if you just sort of directly

1 asked people how important is conservation in  
2 general, and give them some pretty stark  
3 possibilities. And these are just some that we  
4 selected from the survey. I don't care much; I  
5 see little reason to conserve in the future;  
6 strong disagreement with that.

7 And this -- show you some other results,  
8 there is some relatively cynical and hard-nosed  
9 kinds of views of business policy, government and  
10 so on and so forth going on here. This isn't  
11 somehow I think, I'm fairly confident this isn't  
12 somehow just randomly an unusual sample of  
13 Californians.

14 And did this involve real sacrifices.  
15 And some significant minority said that it did.  
16 And a large majority said no.

17 Well, what do you think about the idea  
18 that government is asking people to reduce energy  
19 use. Is this an appropriate role for government,  
20 or should government simply be guaranteeing that  
21 there's an adequate energy supply?

22 And people actually see sort of the  
23 active engagement of government and people in the  
24 energy system as an appropriate thing. And in  
25 fact, are not of the mind that apparently that

1        somehow this should simply be rolled into the, you  
2        know, sort of the power system never has a problem  
3        at any price is not apparently a good policy  
4        option.

5                So, final thoughts. A more detailed  
6        picture persistence of behavior and actual changes  
7        in energy use patterns will be hopefully available  
8        in the fullness of time. And hopefully by May to  
9        contribute to the development of the next draft of  
10       this report. That will depend strongly on the --  
11       will be able to tell a much more nuance story  
12       about consumer self reports of response based on  
13       our survey results.

14               But being able to say something about  
15       persistence in the long run will depend on the  
16       willingness of the utilities who have cooperated  
17       with us in the past to continue to do that and  
18       supply additional data to us here in the next few  
19       months.

20               Thank you.

21               PRESIDING MEMBER BOYD: Loren, could I  
22       ask you a question?

23               DR. LUTZENHISER: Absolutely.

24               PRESIDING MEMBER BOYD: Did you  
25       correlate, or do you have any reaction to the

1 amount of conservation and then the dropoff in  
2 conservation, and the amount of advertising and/or  
3 dropoff in advertising of the subject of an energy  
4 problem?

5 DR. LUTZENHISER: We have not done that.  
6 But we could. And I'll tell you the reason we  
7 haven't. We were going to attempt to do this for  
8 the first year and discovered that in fact the  
9 advertising, say the Flex-Your-Power advertising  
10 was sort of blasted out in a very high volume in a  
11 fairly uniform way over a protracted period of  
12 time throughout the crisis period. And so there's  
13 really no variation to look for correlations in  
14 there.

15 Over a longer period of time, now if we  
16 can pick up, say look at media buys and consumer  
17 response in consumption patterns with weather  
18 adjustment over, say, a longer period through  
19 2002, through 2003, and potentially longer, we  
20 would certainly be able to do that by simply  
21 adding information on media buys to the billing  
22 information, I think.

23 PRESIDING MEMBER BOYD: I was just  
24 wondering if the public correlates the existence  
25 of a crisis and lack of a crisis with the amount

1 of advertising they see to conserve, or whether  
2 they pick up their information in other ways.

3 DR. LUTZENHISER: Well, we also asked  
4 the questions in this survey about with a sub-  
5 sample of this group, about sort of their use of  
6 newspapers and television and advertising and so  
7 on. And frankly, that's another study that we may  
8 want to do, but frankly, we tend to get fairly  
9 uniformly high rates of response to all these  
10 things. Yes, I read the paper; yeah, I watch the  
11 tv; there's some variation there.

12 And we're also looking at sort of market  
13 segments, different demographics that are looking  
14 at different media kinds of things.

15 But, you know, I mean we've taken a look  
16 at the media coverage and have kept track of the  
17 advertising volume over the last year. And this  
18 survey was done in the fall. It was done not in a  
19 period of time in which there was great concern or  
20 play in the press or significant advertising.

21 And we're getting these, you know, self  
22 reports from people who can just as well tell  
23 us -- people tend, you know, in these kinds of  
24 surveys, to over-report behavior. They're trying,  
25 you know, to tell the story that they think people

1 want to hear and so on.

2 So, we've been very careful in the way  
3 we pose our questions, not to be leading in that  
4 regard. And I'm truly confident that these  
5 results, these differences are so strong that  
6 there's got to be something interesting going on  
7 there. It can't be simply associated with the  
8 volume of tv ads. I think it has something to do  
9 with basic attitudes and values.

10 PRESIDING MEMBER BOYD: Thank you.

11 MS. MARSHALL: Okay, the last thing I  
12 wanted to talk about was just briefly discuss our  
13 proposed approach to the scenarios we want to do  
14 for the IEPR.

15 Why are we doing this? The purpose is  
16 not to try and predict different futures, but to  
17 create a framework for evaluating the policy  
18 decisions that we have to make now, and how those  
19 may play out in different states of the world.

20 Our basecase forecast, as you've seen,  
21 is a pretty modest stable recovery; not really  
22 consistent with the kind of business cycles that  
23 we've see in the past. And these are just staff  
24 proposals. We're certainly open; we want to hear  
25 other ideas about other variables; we want to

1 focus on our initial definition is to -- what I  
2 define, what I call the next big boon, the  
3 gigatechnology boon, nanotechnology, what have  
4 you, that would, we'd see an increase in  
5 employment beginning in 2005 of about a 1 percent  
6 per year for four years.

7 We see a focus on production gaining  
8 market share and less on the cost effectiveness of  
9 that production. That income growth spurs more  
10 residential consumption. Employment growth  
11 stimulates population growth, which is something  
12 we've seen historically. So that's our high  
13 demand scenario.

14 Conversely, if we don't have even as  
15 robust a recovery as what is shown in the  
16 basecase, we could have something -- this isn't a  
17 recession, but it's reduced employment growth. If  
18 you don't have the economic markets growing then  
19 businesses are much more focused on efficiency,  
20 much more focused on risk management which would  
21 lead to possibly an increase in the amount of  
22 demand served by onsite self gen, distributed  
23 generation, what have you, which then reduces the  
24 amount of load needed by the system.

25 And we'd also have some level of

1 increased public spending on energy efficiency.

2 So those are -- we're going to add to  
3 this our natural gas unit will also be providing  
4 high and low natural gas price scenarios, so we'll  
5 combine those with the high and low economic and  
6 efficiency scenarios for evaluating natural gas  
7 infrastructure issues.

8 So, at this point I'd like to have our  
9 panelists come up and we'll open it up to your  
10 comments, both on the basecase and issues with  
11 respect to scenarios.

12 MS. JONES: I have a couple of  
13 questions. When you go back to the key  
14 assumptions that are being used for the baseline,  
15 you show item number three as low private supply  
16 self generation. Can you tell me a little bit  
17 about the assumptions that you made there, and  
18 what drives that?

19 MS. MARSHALL: Well, we did say, you  
20 know, in the last few forecast cycles we've  
21 actually assumed flat increase in private supply;  
22 no increase whatsoever. And that's what we've  
23 seen, because the regulatory environment just has  
24 not been conducive to self gen.

25 With the energy crisis we've clearly

1       seen some increase there, by growing faster than  
2       load growth in the last two or three years, but  
3       because of the regulatory uncertainty felt it was  
4       appropriate at this time to do a purely economic  
5       forecast.

6               So we made just a real conservative  
7       assumption of after 2003 it's growing at a 1  
8       percent a year, which means it's growing slower  
9       than overall demand.

10              MS. JONES: And then I had another  
11       question about your real income growth  
12       projections. In the basecase they strike me as  
13       maybe a little optimistic considering where  
14       California is, the budgetary constraints, where  
15       the economy is right now. If you could comment on  
16       that?

17              MS. MARSHALL: The personal income  
18       growth is, yeah, it looks, historical perspective,  
19       yeah, so that's one of the point of doing the  
20       scenarios is what happens if that's too  
21       optimistic. So that's definitely something you  
22       have to keep an eye on.

23              MS. JONES: I think that's it, thanks.

24              MS. MARSHALL: Okay. Why don't --

25              MS. BAKKER: I also have a question,

1 sort of related to that. Noticed that you are  
2 assuming a growth in per capita consumption and I  
3 was wondering, it looks like what you're saying is  
4 that's related to a growth in personal income.

5 But I'm wondering if that is consistent  
6 with what we've projected in the past forecasts of  
7 per capita growth.

8 MS. MARSHALL: It's a little higher, and  
9 it is related to -- well, part of it is the strong  
10 personal income forecast. Another part is we're  
11 seeing -- it's reflected in the rebound of moving  
12 back up towards the long-term trend.

13 So if you look at that chart there was a  
14 big drop in per capita consumption in 2001. And  
15 moving back away from that.

16 MS. BAKKER: And you're sort of showing  
17 that as stead instead of a bump up and then flat?

18 MS. MARSHALL: Yeah.

19 MS. BAKKER: Okay.

20 MS. MARSHALL: Why don't I have my -- at  
21 least a couple of panelists, Tim and -- Vonder  
22 from San Diego and Rick Aslin from PG&E come up  
23 and sit up here and you guys can make your own  
24 comments as you wish. And then we'll open it up  
25 to other people's comments.

1                   Okay, Don Schultz from ORA wants to come  
2 up, too, so come on up, Don.

3                   Okay, Rick, do you want to start?

4                   MR. ASLIN: Sure. Yeah, we can go in  
5 alphabetical order. My name is Richard Aslin and  
6 I work for Pacific Gas and Electric Company. And  
7 hopefully you can all hear me. No? Okay. I'll  
8 try it even closer.

9                   My name is Rick Aslin and I work for the  
10 Pacific Gas and Electric Company. And I just  
11 wanted to start by saying that Pacific Gas and  
12 Electric Company is very happy to participate in  
13 this workshop and in the whole process of bringing  
14 together an integrated energy policy in the State  
15 of California.

16                   And in particular we'd like to thank the  
17 CEC Staff for taking on the somewhat daunting  
18 responsibility of trying to project energy demand  
19 in such an uncertain environment. And just as a  
20 personal note I'd like to thank Lynn very much and  
21 David Vidaver and Tom Gorin and Bill Wood and Todd  
22 Peterson for working with us on an ongoing basis  
23 over the last couple of years.

24                   Because I'm also tasked with the  
25 responsibility of trying to project energy demand

1 for both electric and gas for Pacific Gas and  
2 Electric Company and it can be a very lonely  
3 profession without other people to depend on to  
4 keep you in check.

5 Just some general comments on the draft  
6 forecast. Again, given the amount of uncertainty  
7 about the future, I think we're very pleased that  
8 there is really very little disagreement in  
9 general between Pacific Gas and Electric Company's  
10 view of the next five to ten years of energy  
11 demand and peak load growth and what's contained  
12 in the draft report.

13 And just as an aside, I can tell you  
14 that from PG&E's point of view, given the data  
15 that we have, that we can confirm that the  
16 residential conservation that occurred during the  
17 energy crisis has been pretty sticky. And we make  
18 it around 60 percent persistence at this point.

19 On the nonresidential side it's very  
20 hard to sort out the business cycle effects from  
21 the stickiness of conservation and price effects.  
22 But we know that the nonresidential demand is  
23 still quite muted and very close to the level that  
24 it was during the energy crisis; so the 2001  
25 levels is still being maintained out there.

1 Did you want me to just keep going or?

2 MS. MARSHALL: Okay, no, well, --

3 MR. ASLIN: I can keep going.

4 MS. MARSHALL: All right.

5 MR. ASLIN: I'll just continue because I  
6 only have a couple of quick things to say. The  
7 two major areas in which we have some disagreement  
8 with the staff's draft report and which we would  
9 ask the staff to take a closer look at the draft  
10 report.

11 One is the area of the peak demand in  
12 2003. And if you recall when Lynn put up the  
13 chart that she had from her presentation, if you  
14 look at the 2003 peak demand you will see that in  
15 2003 the peak demand for both Pacific Gas and  
16 Electric Company and SMUD is actually lower than  
17 the 2002 number that's on the chart.

18 And I guess we don't agree with that.  
19 We think that we will see peak demand growth in  
20 2003 relative to 2002.

21 UNIDENTIFIED SPEAKER: Could you comment  
22 on what the factors are that (inaudible).

23 MR. ASLIN: Well, basically we're  
24 looking at population growth continuing around  
25 like 1.25 percent, or 1.3 percent in our service

1       territory. So that, in itself, even if there  
2       wasn't any increase in consumption per capita,  
3       would induce peak demand growth of about 1.25  
4       percent just on its own.

5               And all the economic forecasts do call  
6       for this recession to end and things to start  
7       getting better some time in 2003.

8               MS. BAKKER: I have another question on  
9       that. The staff is using a one-in-two weather  
10      assumption in developing that particular forecast.  
11      Is that a difference, also, from PG&E's  
12      assumptions?

13              MR. ASLIN: No. We used basically the  
14      same setup that the staff had. We do a one-in-  
15      two, or the expected value of one-in-five or one-  
16      in-ten. So.

17              MS. BAKKER: But you were commenting on  
18      the relative, the comparison of your one-in-two  
19      forecast and their one-in-two forecast?

20              MR. ASLIN: Yes, that's right.

21              MS. BAKKER: Thank you.

22              PRESIDING MEMBER BOYD: Lynn, I'd like,  
23      if anybody in the audience wants to ask a question  
24      of the specific presentation, please come up to  
25      the mike. The gentleman with your hand up, please

1 use the mike so we can hear you to know how bad  
2 the acoustics are in this room.

3 MR. SKOWRONSKI: Mark Skowronski, Duke  
4 Solar. I read someplace where the resource  
5 planning function will be given back to the  
6 utilities.

7 How is this going to be transferred and  
8 what's the timeframe, and what's the relative  
9 responsibilities of the utility and the CEC for  
10 preparing the forecasts?

11 MR. ASLIN: I'm going to pass on that  
12 one.

13 (Laughter.)

14 MS. MARSHALL: I believe the PUC's  
15 procurement decision did request that the  
16 utilities and the CEC collaborate on their  
17 forecasts; and that the forecasts that the  
18 utilities use should be consistent with ours. And  
19 so we've been coordinating with the utilities in  
20 trying to identify any inconsistencies, so.

21 But it's not a formal process. So,  
22 reasonable statement. No comment?

23 DR. SCHULTZ: As I understand it the  
24 procurement process and proceeding did expect to  
25 require the utilities file a resource plan which

1 includes a demand forecast by April 1st --

2 MS. MARSHALL: Don --

3 DR. SCHULTZ: -- is that right?

4 MS. MARSHALL: Don, can you identify  
5 yourself?

6 DR. SCHULTZ: Yeah, I'm sorry. My name  
7 is Don Schultz; I'm with the Office of Ratepayer  
8 Advocates.

9 My understanding is that the procurement  
10 proceeding did expect the utilities to file a  
11 resource plan by April 1st, I believe, that would  
12 include a demand forecast. But I'd like to add  
13 that to a question of the utilities is whether or  
14 not their forecast at that time will include an  
15 estimate of self generation, if it's any different  
16 than what Lynn has identified in the CEC's?

17 DR. VONDER: I can't say.

18 DR. SCHULTZ: Do you know, Rich, about  
19 PG&E?

20 MR. ASLIN: No, I don't think we've  
21 finalized our forecast at this point. It's still  
22 open.

23 DR. SCHULTZ: But is a forecast of self  
24 generation, future self generation something that  
25 you expect to put in your April 1st filing?

1           MR. ASLIN: I believe we would have to  
2     have some sort of projection of the future self  
3     generation in order to establish the net short  
4     position, so I would assume that there would be  
5     something in there. But as to how much it differs  
6     from the CEC's forecast, I don't know.

7           One thing we do know is that the CEC's  
8     forecast just assumes 1 percent growth. So, it's  
9     kind of a -- if that's a correct statement?

10          MS. MARSHALL: Um-hum.

11          MR. ASLIN: It just assumes the 1  
12     percent growth. It's really more of an assumption  
13     than an attempt to do some sort of economic  
14     modeling on the feasibility of distributed  
15     generation.

16          DR. SCHULTZ: Then can I get some  
17     clarification because it's 1 percent per year I  
18     thought. And is --

19          MS. MARSHALL: Yeah.

20          DR. SCHULTZ: -- that in the basecase  
21     scenario or is that in the scenario three?

22          MS. MARSHALL: That's in the basecase  
23     from 2000-and -- after 2003.

24          DR. SCHULTZ: So 1 percent per year --

25          MS. MARSHALL: Yeah.

1 DR. SCHULTZ: -- over the ten years --

2 MS. MARSHALL: And that's just --

3 DR. SCHULTZ: -- is --

4 MS. MARSHALL: -- you know, that's not a  
5 forecast. That's just a conservative assumption.  
6 So we don't know yet how, you know, the regulatory  
7 issues like the exit fee will play out. And we've  
8 seen, you know, in 1996 we saw a big boom in  
9 distributed gen and it died, you know, and it went  
10 flat.

11 So, you know, we could have that  
12 scenario again. So, we think it's more prudent  
13 not to over-estimate self gen in the basecase  
14 forecast. Or not to be too optimistic.

15 But that's certainly something that's  
16 worth exploring in the scenarios.

17 MR. ASLIN: Yeah, although, if I could  
18 just comment here, one of the -- probably the  
19 threshold issues on distributed generation growth  
20 that needs to be wrestled with is whether  
21 distributed generation should be handled on the  
22 resource side, or whether it should be handled on  
23 the demand side.

24 So I think there's some implications as  
25 to how you handle that. So I think that might be

1       some threshold issue that PG&E is currently  
2       struggling with.

3               MR. ABELSON: My name is David Abelson;  
4       I'm staff counsel for the Energy Commission on  
5       this project. And just a quick couple of  
6       questions for you, if I could.

7               Number one, to the extent that PG&E has  
8       a different baseline for the peak in 2003, does  
9       that then change the rest of the line as you move  
10      out to 2013?

11              MR. ASLIN: Yeah, thanks for that  
12      question, that's a very good question. In  
13      general, the long-term growth rate that we have  
14      for peak growth is almost exactly the same as the  
15      Energy Commission's growth rate. I think their  
16      long-term growth rate for PG&E peak was about 1.8  
17      percent, and that's exactly what ours is in the  
18      long run.

19              And the issues that we have are more  
20      with the near term part of the forecast, so that  
21      2003 and 2004 we have a problem with -- and  
22      especially with 2003 being lower than 2002.

23              MR. ABELSON: And then the only other  
24      question I would have was that you identified two  
25      possible drivers that would account for that near-

1 term difference, one being population and the  
2 other being the economic recovery.

3 Is there actually a difference between  
4 the staff's forecast on population assumptions and  
5 PG&E's?

6 MR. ABELSON: I don't think so. I  
7 looked at the staff's forecast. I didn't have the  
8 details behind it, but it looked like for PG&E's  
9 service territory the population growth was  
10 somewhere like 1.2, 1.3 in the first five years or  
11 so, and then drops below 1 percent once you get  
12 out past 2008. That's very consistent with our  
13 internal forecast that we're using.

14 MR. ABELSON: So then is it fair to say  
15 that the main problem for that short term appears  
16 to be a question of how quickly the economy will  
17 recover in the next year or so? Does that seem to  
18 be the essence of it?

19 MR. ABELSON: I really don't know. It  
20 could be just some sort of difference in  
21 calibration.

22 MR. ABELSON: Thank you.

23 MS. MARSHALL: Okay. Yes?

24 MR. SPARKS: I'm Robert Sparks from the  
25 California ISO. I just had a clarifying question

1 on the 1 percent self generation. Is that 1  
2 percent of the total energy production or 1  
3 percent of the self --

4 MS. MARSHALL: One percent --

5 MR. SPARKS: -- generation production?

6 MS. MARSHALL: -- increase in self gen.

7 UNIDENTIFIED SPEAKER: And what is the  
8 bases for it? Do you have that documentation  
9 available? The level of self gen.

10 MS. MARSHALL: Well, it's around 3  
11 percent of energy; it's pretty small, so.

12 MR. KELLY: Steven Kelly with  
13 Independent Energy Producers Association. I have  
14 two questions. The first question is I think it's  
15 in response to the comment that PG&E made where  
16 they were talking about the stickiness, which I  
17 think is the persistence of conservation. And  
18 PG&E had indicated that they were using 16  
19 percent. I think the staff has indicated they're  
20 using a third to a half, which is two to three  
21 times as much. And I was wondering if there was a  
22 reason for that, or how are we treating  
23 persistence of conservation over time?

24 MS. MARSHALL: Well, actually, Rick, 60  
25 percent within the residential sector --

1 MR. KELLY: Sixty or 16?

2 MS. MARSHALL: -- consistently.

3 MR. KELLY: Sixteen?

4 MR. ASLIN: 6-0.

5 MR. KELLY: Oh, okay, I thought he said

6 16.

7 MS. MARSHALL: Sixty percent in the  
8 residential sector, specifically, and --

9 MR. KELLY: Okay, I had mis --

10 MS. MARSHALL: -- we haven't done that  
11 estimate by sector. So, given the error on this  
12 type of analysis I'm not sure we're that -- I  
13 don't think we're that far apart.

14 MR. KELLY: I couldn't hear him from the  
15 back. I thought he said 16, so. The second  
16 question I have then is you have three scenarios  
17 and I wondered if you'd determined what the  
18 likelihood of any one of those scenarios is going  
19 to occur over the next three to five years. Are  
20 they all equally likely? Or is there on that is  
21 higher likely probability?

22 MS. MARSHALL: We're not trying to  
23 assign probabilities to them. That's not really  
24 the point. The point is to have some, to have a  
25 framework for thinking about our policy decisions

1 for evaluating our infrastructure under different  
2 situations.

3 So we're not trying to do, you know, --

4 MR. KELLY: Well, will we be --

5 MS. MARSHALL: -- assign probabilities  
6 to these.

7 MR. KELLY: At any time in the future  
8 will we be dealing with likely probabilities to  
9 determine -- because you're going to presumably  
10 send some recommendations someplace. Is that  
11 going to be part of this process?

12 CHAIRMAN KEESE: Well, speaking for  
13 myself the most likely probability is that it  
14 stays on a normal course. I heard 1.8 percent.  
15 Yes, that's 1.8 percent is the most likely.

16 However, it's 50/50 whether it will be  
17 that or something above or below. So you have to  
18 look at all three.

19 I agree, it doesn't really -- we're not  
20 going to try to say this is exactly what it's  
21 going to be and we should shape our policy to  
22 that. We have to shape our policies to  
23 accommodate any one of the three, recognizing that  
24 it should stay, you know, over ten years it'll be  
25 1.8 percent. It'll go up, it'll go down, it'll

1 get back to 1.8 percent.

2 MR. KELLY: Thank you.

3 MS. BAKKER: In actual fact, Steve, I  
4 think that it's an open question still how we're  
5 going to deal with the risk analysis that's coming  
6 up. That's a big question in my mind, too.

7 MS. JONES: And I was going to add if  
8 the parties have suggestions on how you go about  
9 assigning probabilities to different scenarios  
10 that would be extremely helpful to help people  
11 think about how you would go about doing that.

12 MR. KELLY: One suggestion that I had  
13 thinking of that is I think everybody agrees that  
14 California's kind of in a recession, and there's  
15 probably we have a historical record of how strong  
16 economies come out of recessions. And there might  
17 be some empirical data that it would help you  
18 gauge if we do come out, from that point on, how  
19 robust the economy is going to be. Might be  
20 helpful.

21 MR. WAITMAN: I'm Chuck Waitman with  
22 Tesoro Petroleum. And the question I would like  
23 to ask is in 2004 I think you're showing a  
24 relatively strong decrease in the electric rates.  
25 But I don't see that you saw a peak, you know, a

1 spike in demand or a kick in demand associated  
2 with that drop in price.

3 So I guess the question is do you really  
4 think that demand growth is insensitive to the  
5 price of electricity?

6 MS. MARSHALL: Actually there is an  
7 increase in demand in 2004 in response to that.

8 MR. WAITMAN: Okay, so that's --

9 MS. MARSHALL: Yeah, --

10 MR. WAITMAN: Okay. Thank you.

11 MS. SAVAGE: Hi, J.A. Savage; I'm with  
12 California Energy Markets. And on the way out  
13 here t his morning I got a phone call from the guy  
14 on my staff who watches prices on the wholesale  
15 market. And he said in the last 24 hours the  
16 price of natural gas and electricity on the  
17 wholesale market have tripled, quadrupled --  
18 shaking your head -- and the only thing that  
19 anybody can relate that to is jitters about the  
20 war in Iraq.

21 Now, in listening to your presentations  
22 and your assumptions, it seems like that's not one  
23 of the things you're considering. And I want to  
24 know if not, why not. And if not, how useful can  
25 this be for this war that everybody pretty much

1 knows that we're going to get into and will affect  
2 our economy and our consumption.

3 Thank you.

4 MS. MARSHALL: That's certainly a good  
5 point. I think that probably the useful way to  
6 think about that is in terms of the high and low  
7 scenarios we're planning on doing. And how the  
8 war might have some secondary impacts that  
9 exacerbate those trends.

10 But this is a ten-year forecast, and I  
11 guess most thinking is the war will play out in a  
12 much shorter timeframe, so.

13 DR. ARTHUR: My name is Dave Arthur; I'm  
14 a resource planner for the City of Redding.  
15 Although my comments are more from my prior  
16 existence when I was at Portland General.

17 A question I had is that you had a  
18 presentation that dealt with survey information,  
19 which is always interesting, but it isn't always  
20 very reliable.

21 For example, as I was driving down from  
22 Redding this morning they pointed out that the  
23 consumer confidence level had taken a dramatic  
24 drop. At the same time they reported that housing  
25 purchases were quite a bit up.

1           So, the question I have is have you  
2       looked at actual behavior as opposed to  
3       perception. For example, when people buy  
4       appliances are they buying the efficient  
5       appliances and paying the extra 10 or 20 percent  
6       or whatever that cost is. When they buy washing  
7       machines do they buy the \$900 model versus the,  
8       say, \$400 model? Have they changed their pattern  
9       of behavior as it relates to their purchase of  
10      their vehicles?

11           It seems to me if we look at actual  
12      purchasing behavior we would learn far more than  
13      we would by running around asking people what they  
14      do. Because it turns out often they don't really  
15      know what they do.

16           PRESIDING MEMBER BOYD: I would like to  
17      get this back on course. I invited people to ask  
18      questions of the PG&E panelists and now we've gone  
19      into a broad series of questions.

20           So, can we hear from the other panelists  
21      before we get into broad general questions, which  
22      are very fair and good questions. And ask  
23      questions of the individual presenter if you have  
24      one, for clarification. And at the end let's have  
25      the more freewheeling broadbased discussion in

1       which I may join, too.

2               MR. ASLIN: Well, if before we move to  
3       the next panelist, if I could just -- we had one  
4       more area where PG&E has a fairly significant  
5       disagreement with the staff's draft forecast, and  
6       that's in the area of PG&E's residential demand  
7       growth.

8               Where the staff has residential demand  
9       growth, and this is on the energy side, for PG&E.  
10      In the first five years of the forecast it's  
11      almost 3.5 percent per year on average. And then  
12      in the outer years of the forecast it's about 2.7  
13      percent on average.

14              And internally PG&E's own forecasts show  
15      residential demand growth something more like 1.5  
16      percent over that period of time. And you can see  
17      that with compounding that sort of difference in  
18      the growth rates makes a huge difference in  
19      residential demand after 10, 12 years.

20              And I just wonder if the staff can take  
21      a look at that. Because if you look at the  
22      historical data and you do something like you  
23      compare average five-year growth rates for the  
24      entire period from 1980 through the year 2000,  
25      you'll find that the average growth in residential

1 demand is about 2 percent. And the average growth  
2 in households over that period of time or  
3 population is about 1.8 percent.

4 So, given that the projections for  
5 population growth for PG&E are about, you know,  
6 1.3 percent, it seems like a forecast of 1.5  
7 percent is more in line with historical trends.

8 And, again, because these are forecasts  
9 nobody knows the right answer, or there isn't  
10 really a right answer, but I would ask that the  
11 staff take a look at that and think about that.  
12 Whether that growth rate seems high. Because it  
13 is high historically.

14 And that's all I have. Thanks very  
15 much.

16 MS. MARSHALL: Okay. Tim?

17 DR. VONDER: Well, SDG&E's comments are  
18 kind of short. The bottomline, we think your  
19 energy forecast, electric energy forecast is  
20 reasonable.

21 (Off-the-record microphone comments.)

22 DR. VONDER: I said bottomline SDG&E  
23 believes that your energy forecast, electric  
24 energy forecast for our service territory is  
25 reasonable.

1           I think we need a little more work in  
2     the weather scenarios. Your one-in-five, one-in-  
3     ten, one-in-40 case where we really don't see that  
4     your analysis has given much of an impact in the  
5     San Diego area as compared to let's say the Edison  
6     service territory area. So I think that needs to  
7     be looked at.

8           Basically that's my comment.

9           MS. MARSHALL: All right.

10          MR. SCHOONYAN: Gary Schoonyan, Southern  
11     California Edison. I'm going to keep my comments  
12     real brief, as well. We believe, in reviewing the  
13     forecast -- and we've been working with the staff  
14     of the Energy Commission, as well -- represents a  
15     balanced forecast. We're not going to be  
16     deviating much, if at all, from that particular  
17     forecast in what we put forth.

18          I do have a couple of things to address.  
19     Just by way of background, back in the mid '70s  
20     when the Energy Commission started, they looked to  
21     the utilities to get data to develop their systems  
22     and what-have-you.

23          I think we've been out of the planning  
24     business for a period of time, and in many  
25     instances we're looking to the Energy Commission

1 to provide a lot of the base data, the modeling  
2 and what-have-you to help us get started to  
3 actually get back into the resource planning type  
4 of area.

5 And we appreciate the efforts and the  
6 discussions that we've had with the staff to date.  
7 And to the extent that particularly in the load  
8 forecast area, to the extent that the information  
9 and even the modeling that has been used by the  
10 Commission were made available, it would help  
11 along those lines.

12 That's not to say that we're not going  
13 to do our forecast, but we're looking, in many  
14 instances, at least just restarting this effort,  
15 to the Energy Commission to basically provide a  
16 lot of the base data, since they've been doing  
17 this more recently than we have.

18 A couple of things, too. There was some  
19 discussion with regards to coordination between  
20 this agency and what they're doing and what's  
21 going on at the Public Utilities Commission. They  
22 had a prehearing conference, just by way of  
23 background, and a ruling came out from the ALJ in  
24 that procurement proceeding. And at least from  
25 what our reading of it is, although we will be

1 doing 20-year resource plans, the primary focus of  
2 that effort appears to be on the next five years.  
3 At least that's what the judge had indicated.

4 So, I mean although most of our  
5 attention in that proceeding is going to primarily  
6 be directed to the first five years. At least  
7 that's the way it is looking at this point in  
8 time.

9 Just a couple of observations and maybe  
10 a question or two with regards to the forecast, or  
11 at least our understanding of it. We will be  
12 including a self gen element of it. I'm not sure  
13 what that is, but it will be included as part of  
14 our base forecast.

15 Regarding the demand scenarios, the  
16 questions that you have up there, at least from my  
17 personal observation, I think as it relates to  
18 demand and energy consumption a couple of the key  
19 ones at least would be the area of demand  
20 responsiveness. I don't foresee a lot of  
21 reduction in that in the next three or four years;  
22 however there are pilots going on at the Utilities  
23 Commission. There's quite a bit of focus on  
24 demand responsiveness.

25 To the extent that that does materialize

1 is something that does reshape customer load or  
2 usage. That is an uncertainty that's out there in  
3 the future that would affect potentially,  
4 definitely demand, and potentially energy  
5 consumption over the period of time.

6 I guess the final thing, and this  
7 relates to the presentation on the surveys and  
8 what-have-you. One of the things that occurred  
9 over the last couple of years was the 2020 program  
10 of the administration. And I'm not sure what  
11 impact that had or didn't have with regards to the  
12 consumption of electricity on the part of  
13 residential consumers. But at least within our  
14 service territory there was a significant portion  
15 of our residential consumers that took advantage  
16 of that program; on the order of, if I recall, 40  
17 to 45 percent, if my memory serves me well.

18 So there could be some impact on that  
19 because I doubt if that particular program is  
20 going to go forward. That primarily focused on  
21 the summertime, but that did have a noticeable  
22 impact at least on the amount of rewards that we  
23 gave back to consumers.

24 And I guess the final observation I  
25 have, and it has nothing to do with Edison, but I

1 did notice in looking at your statewide forecast  
2 that you showed no growth in energy consumption  
3 for the State Water Project. And I guess the only  
4 question I have there is everything I read is that  
5 the southern California area is going to get less  
6 and less water from the MWD, the Colorado River.  
7 That more and more potentially would be required  
8 on the aqueduct, thus one would think that there  
9 would be increased pumping demands on the State  
10 Water Project.

11 Thank you.

12 DR. SCHULTZ: My name again is Don  
13 Schultz. I'm with the Office of Ratepayer  
14 Advocates. I really don't have any comments or  
15 question other than the ones that I mentioned  
16 before in terms of the utilities and understanding  
17 that utilities will be preparing self generation  
18 forecasts.

19 But I'm looking forward to look at what  
20 that forecast is and how it may differ from what  
21 the staff has been using.

22 MS. MARSHALL: Do we have other public,  
23 anyone else who would like to make comments or  
24 questions?

25 MS. BACHRACH: Hi, I'm Devra Bachrach

1 with the Natural Resources Defense Council. Thank  
2 you for the opportunity to offer comments on those  
3 draft demand forecasts today.

4 I'd like to begin by responding to the  
5 question posed by Ms. Marshall earlier about how  
6 the forecast should include energy efficiency.  
7 The baseline demand forecast, we believe,  
8 absolutely must include, at a minimum, the public  
9 goods charge funded energy efficiency programs.  
10 And the baseline forecast should also include  
11 considerable additional energy and demand savings  
12 due to California's recent restoration of the  
13 utilities portfolio management responsibility that  
14 we've already discussed somewhat today.

15 At an absolute minimum the investor-  
16 owned utilities are required, by law, to spend  
17 \$228 million a year on energy efficiency, so it  
18 would be inconceivable for a, you know, best  
19 estimate of what the future demand in California  
20 would be to exclude these programs from the  
21 forecast.

22 And more realistically, the baseline  
23 forecast should include additional energy and  
24 demand savings beyond these PGC-funded programs as  
25 the utilities are integrating energy efficiency

1       into their portfolios of resources.

2               It's likely that there will be higher  
3       levels of investment in energy efficiency because  
4       California has in place a number of policies to  
5       encourage this, and because they're some of the  
6       least-cost resources available to the utilities as  
7       they go about their procurement.

8               Just to lay out a couple of the policies  
9       in place in California, California law states  
10      that, quote, "utilities should seek to exploit all  
11      practicable and cost effective conservation and  
12      improvements in the efficiency of energy use and  
13      distribution.

14              And the Public Utilities Commission last  
15      October required that the utilities, quote,  
16      "consider investment in all cost effective energy  
17      efficiency regardless of the limitations of  
18      funding through the public goods charge mechanism.

19              There have been recent estimates, as  
20      you're well aware, of the potential for cost  
21      effective energy efficiency in California. A  
22      recent report by Xenergy that indicates that the  
23      utilities could quadruple their investments in  
24      energy efficiency and still not exhaust the pool  
25      of available and cost effective resources.

1           So the CEC's demand forecast, the  
2     baseline forecast, should reflect the likelihood  
3     that the utilities will be pursuing a significant  
4     amount of this resource as the least-cost option  
5     available for them in procurement.

6           As I understood the rationales right now  
7     for excluding the impact of energy efficiency in  
8     the current draft forecast, where number one that  
9     the amounts and the allocation of the efficiency  
10    funding is uncertain. But at least for the public  
11    goods charge programs the amount is required, it's  
12    set in law, so that is absolutely certain going  
13    forward.

14          And the second rationale that I saw was  
15    that it would eliminate double counting of energy  
16    savings. And we certainly appreciate the concern  
17    that we need to avoid double counting of energy  
18    savings from the efficiency programs. But we  
19    suggest that the solution is to simply provide  
20    detailed information about the energy and demand  
21    savings that are assumed to come from each of the  
22    specified energy efficiency programs, and include  
23    that information in the forecast.

24          So I want to emphasize that in its  
25    current form the draft demand forecast provides a

1 very pessimistic view of very high electricity  
2 growth, or growth in the use of electricity in  
3 California, rather than a best estimate of demand  
4 incorporating the CEC's current state of  
5 knowledge, which includes all of these policies  
6 that are in place in California.

7 Together with the, what I'll call the  
8 resource plan that we'll be discussing later, the  
9 draft reports together paint sort of a worst case  
10 scenario for power plant and transmission line  
11 construction in California by ignoring all of the  
12 policies that are in place to encourage energy  
13 efficiency in Senate Bill 1194, Assembly Bill 57  
14 and the PUC's procurement decision last October.

15 So we urge the CEC to develop a baseline  
16 forecast that really reflects your best estimate  
17 of what the future is going to hold, and  
18 incorporates the cost effective energy efficiency  
19 that the utilities will be pursuing.

20 My second comment is that we urge the  
21 CEC not to delay the utilities resumption of long-  
22 term procurement responsibilities in order to  
23 incorporate the results of this IEPR into that  
24 process.

25 It's absolutely critical, as we all

1 know, that the utilities resume procurement as  
2 soon as possible and begin taking advantage of  
3 cost effective energy efficiency opportunities.  
4 And we're concerned that the CEC may delay the  
5 utilities from increasing these sorely needed  
6 investments in energy efficiency through the  
7 interaction between the CEC's participation in the  
8 PUC's procurement proceeding and this IEPR  
9 process.

10 The CEC Staff recently suggested at the  
11 PUC's prehearing conference on utility procurement  
12 that the PUC postpone resolution of the utilities  
13 long-term procurement plans until the CEC has an  
14 opportunity to complete this IEPR. But at the  
15 same time, as I read in the draft demand forecast  
16 report, the CEC is considering waiting to see the  
17 outcome of the utilities procurement plans going  
18 forward, at least for energy efficiency, in this  
19 draft demand forecast.

20 So, taken together, these remarks  
21 suggest sort of a delay of uncertain duration  
22 during which California continues to loose  
23 opportunities to take advantage of cost effective  
24 energy efficiency to the detriment of both utility  
25 customers and to the environment.

1           We really can't afford to wait and we  
2 believe that the CEC has adequate time to  
3 integrate the preliminary information from the  
4 utilities procurement plans. They will be filing  
5 long-term plans on April 1st. And we urge you to  
6 not delay the utilities from resuming their role  
7 as portfolio managers.

8           Finally I would like to provide our  
9 suggestions on the various scenarios that you  
10 requested comment on. We agree that the CEC  
11 should develop probably three scenarios, and I'll  
12 just speak in terms of different energy efficiency  
13 scenarios.

14           The first scenario would be a high  
15 demand scenario in which the utilities only invest  
16 the minimum amount of PGC funding required by law  
17 in energy efficiency programs every year.

18           The baseline forecast, as I've  
19 discussed, would be having the utilities invest  
20 the minimum amount of PGC funding in energy  
21 efficiency plus additional procurement money in  
22 energy efficiency.

23           And if the CEC were to use Xenergy's  
24 recent study of the potential for cost effective  
25 energy efficiency savings that are achievable

1 through utility programs, this would result in  
2 5900 megawatts of savings by 2012.

3 The third scenario that we suggest is a  
4 load demand scenario in which the utilities  
5 capture all cost effective energy efficiency  
6 opportunities. And, again, if you were to use  
7 Xenergy's recent report, that would result in about  
8 9600 megawatts of savings by 2012.

9 Finally, I have a number of clarifying  
10 questions that we could either answer now or just  
11 questions to be clarified in the next version of  
12 the report.

13 The first question is in the summary of  
14 the report it states that energy consumption  
15 decreased by 3.8 percent in 2001. Whereas the  
16 spreadsheet that's posted on the CEC's website  
17 reports a 4.4 percent decrease in 2001, 5.2  
18 percent when adjusted for weather. And I just  
19 want a clarification as to where the difference  
20 between the 3.8 percent and the 4.4 percent lies.

21 MS. MARSHALL: Yeah, the 3.8 percent is  
22 the decrease in the total energy consumption  
23 statewide, unadjusted for weather. We've also  
24 been doing a little different analysis just using,  
25 just for the ISO and trying to adjust for weather

1 and economics. And those are the website numbers.  
2 So they're different products.

3 MS. BACHRACH: So the 3.8 percent is all  
4 California and the 4.4 is --

5 MS. MARSHALL: That's actual --  
6 difference in actual reported consumption data to  
7 us; whereas the other is an estimate based on ISO  
8 data.

9 MS. BACHRACH: Okay, thank you. My  
10 second question is whether the draft forecast  
11 includes the savings from the CEC's energy  
12 efficiency standards, and if so, whether it  
13 includes the savings from the recently enacted  
14 appliance standards, and whether it includes the  
15 savings from the 2005 building standards update?

16 MS. MARSHALL: Yes.

17 MS. BACHRACH: It includes both of  
18 those?

19 MS. MARSHALL: Yeah, to the extent,  
20 yeah, anything that's regulations that have  
21 already been put in place we have accounted for.

22 MS. BACHRACH: So the 2005 building  
23 standards update have not been completed so they  
24 would not be included?

25 MS. MARSHALL: Not the 2005; the others

1 have.

2 MS. BACHRACH: Okay. I would also  
3 suggest that it would be helpful if you could  
4 delineate the amounts that are assumed to come  
5 from the savings in the report.

6 My third question is whether the CEC  
7 expects to conduct an assessment of the technical  
8 and economic potential for energy efficiency in  
9 California, or whether you'll be relying on  
10 Xenergy's recent report?

11 MS. MARSHALL: There are no plans that  
12 I'm aware of for the Energy Commission to be  
13 undertaking potential studies. We'll budget for  
14 any such thing, so --

15 MS. BACHRACH: Okay. And my last  
16 question has been clarified somewhat by the  
17 presentation today. In reading the draft report  
18 it wasn't entirely clear how much of the  
19 conservation from 2001 was assumed to persist,  
20 both in terms of voluntary conservation and in  
21 terms of hard-wired efficiency of both peak demand  
22 and energy savings.

23 So I'd just suggest that it would be  
24 very helpful if you could include some of the  
25 graphs you showed today and additional information

1 about that actually in the report.

2 Thank you very much.

3 MS. MARSHALL: Okay, thanks.

4 MR. SCHOONYAN: Can I make a followup  
5 observation based on that. A couple of things  
6 with regards to energy efficiency. I mean we're  
7 looking at it as basically a resource, and so when  
8 I mentioned the fact of going along and basically  
9 agreeing with what the staff had as a demand  
10 forecast, additional energy efficiency as a result  
11 of PGC funds and if any of you read our long-term  
12 procurement outline of February 3rd, we committed  
13 to go beyond that to the extent that it was cost  
14 effective, which in many instances it is. It's  
15 the right thing to do.

16 Plus, there also has to be, and this is  
17 my second comment, has to be some change in the  
18 way energy efficiency is done at the Utilities  
19 Commission. Presently it's basically done more  
20 like an innercity bus rights, stop, start, one-  
21 year at a time; as opposed to a thoughtful, long-  
22 term program of delivering energy efficiency.

23 And once the Commission gets around to  
24 actually coming up with a longer term program for  
25 administering energy efficiency, I think we'll be

1       able to enter into types of programs that are well  
2       beyond that of just the PGC level.

3               MR. ASLIN:  If I could just speak for  
4       PG&E on that same issue.  Both of those we would  
5       echo the same sentiment.

6               First of all, on the demand forecast, I  
7       think it's going to get a little bit muddy if we  
8       start to put in a lot of policy in the demand side  
9       of the forecast.  I think those sort of policy  
10      issues around cost effective demand side  
11      management, conservation and so on and so forth  
12      are -- the discussion is going to be much more  
13      clear if those are discussed on the resource side  
14      of the equation rather than try to embed them in  
15      the demand side of the equation.

16              And with respect to the conservation  
17      programs in general, I think PG&E would also agree  
18      that in order for conservation programs to be  
19      effective they have to be very stable programs so  
20      that you can line up your channels and  
21      distribution and get everything in place.  That's  
22      the only way that those things are really going to  
23      be cost effective.

24              DR. VONDER:  And I guess from SDG&E's  
25      view of the way you've treated DSM in your

1 forecast it looks to me consistent with the way  
2 the Energy Commission has prepared forecasts  
3 before.

4 When we called these programs -- at one  
5 time we called them committed programs and  
6 uncommitted programs. And the committed DSM was  
7 always included in the demand forecast. And the  
8 uncommitted, which are the future-looking DSM  
9 programs that really weren't defined yet, was  
10 treated as a resource in the resource planning  
11 side.

12 So I guess the question is, is that the  
13 way -- is that your intent? Is that how you plan  
14 on handling DSM for this --

15 MS. MARSHALL: Yeah, I think that could  
16 be -- that's one of the things we're getting  
17 comments on today, but I think that's a good  
18 approach. Has some advantages as opposed to  
19 burying it in the demand forecast. That was why  
20 we did it this way.

21 MS. SAVILLE: Hello, my name is Tracy  
22 Saville and I'm a Vice President for Governmental  
23 Affairs for a company called RealEnergy. We're an  
24 owner and operator of about 22 megawatts of onsite  
25 cogeneration and solar in California and New York,

1       though most of that is in California.

2               I'm also a prior employee of the  
3       California Power Authority last year. And before  
4       that I worked about a year with the Flex-Your-  
5       Power campaign through the Governor's Office. And  
6       with many of you here and energy agencies.

7               I had a comment and a question, and I'll  
8       have more tomorrow in the area of distributed  
9       generation. In particular, first I want to go  
10      back to the gentleman from PG&E when he posed the  
11      question of whether DG should be or is appropriate  
12      as a function of demand or resource planning. And  
13      I think it's a fair question.

14              But my comment is I believe it should be  
15      both. And to the extent that if you apply a  
16      least-cost best-fit proposition, it should be both  
17      demand and resource for planning decisions for  
18      what we hope to accomplish in DG production in the  
19      future, both for meeting peak demand, but also  
20      placed as a component of specific resource  
21      decisions. And really specifying how much  
22      distributed generation, not just that which we  
23      think will come online because of what we know has  
24      happened historically, but what we aggressively  
25      plan for in our resource, our procurement

1 decisions that are being deliberated today.

2 It isn't clear to me, and I'm involved  
3 in eight proceedings at the PUC where DG issues,  
4 rate issues, procurement decision issues are being  
5 deliberated, that, in fact, the state, from a  
6 policy perspective, is making forward thinking  
7 decisions today about DG and its place in our  
8 resource decision making, whether we look at it as  
9 a demand or as a resource response.

10 And I think if we don't have appropriate  
11 tariffs in place and rate structures in place,  
12 even our most conservative assumptions potentially  
13 could be flawed.

14 Secondly, and this is both a comment and  
15 a question, the 1 percent assumption for growth  
16 for self generation, you said that's based on the  
17 basecase, so that is based on what you have seen  
18 in the last two years?

19 MS. MARSHALL: Actually in the last  
20 couple of years I think there's been a larger  
21 increase than that.

22 MS. SAVILLE: So how are you factoring  
23 in the historical increase in self generation  
24 versus your 1 percent future assumption?

25 MS. MARSHALL: Well, we do have -- I'm

1 not sure exactly, I'll tell you what we did. We  
2 have historical data on actual self gen. The  
3 utilities have been sharing with us data on  
4 interconnections which gives you a pretty good  
5 picture of what's happening --

6 MS. SAVILLE: I'm familiar with those  
7 reports.

8 MS. MARSHALL: -- 2001, 2002. But after  
9 that, because of the regulatory uncertainty, 1  
10 percent is just a --

11 MS. SAVILLE: So the assumption is 1  
12 percent based --

13 MS. MARSHALL: Yes.

14 MS. SAVILLE: -- on almost a capped  
15 assumption of what could eke through, given the  
16 barriers and the uncertainty that are in place?

17 MS. MARSHALL: Yeah.

18 MS. SAVILLE: Okay. So I'll go back to,  
19 I suppose, my comment which is that it isn't clear  
20 to those in the market or end-use customers or  
21 ratepayers where DG not only fits, but where it  
22 will be in terms of the planning decisions.

23 I think your report and your work will  
24 be very important in delineating not only a  
25 framework for how we analyze self generation,

1 distributed generation, in terms of our planning  
2 and our resource decisions, but also it will bode,  
3 I think, very clearly to folks at the PUC and  
4 others who are also making decisions outside of  
5 your report. The utilities' filing of their  
6 resource plans, as it was said by the gentleman  
7 from SCE, will be more short-term at least for the  
8 next five years beyond '04.

9 And we aren't seeing any evidence that  
10 there will be really any significant portion of  
11 distributed generation being planned for by the  
12 utilities. Whether that be in their procurement  
13 or in growth projections.

14 And finally, I'll just close with two  
15 examples of how I feel that more work needs to be  
16 done in truly understanding what we can expect in  
17 the worst case scenarios for self generation,  
18 given the uncertainty and unresolved issues, but  
19 also in the best case for that which we would plan  
20 for and decide to remove barriers in order to  
21 count on a certain amount of DG as part of our  
22 resource and our procurement plans.

23 The first is that as a company, we're  
24 three years old, and we have -- we're slightly  
25 different in that we own our operating assets. We

1 lease base from customer owners on a 15-year  
2 contract and we sell our output electricity, waste  
3 heat, thermal byproducts and solar generation at a  
4 discount to what they would otherwise pay the  
5 utility.

6 There are other companies out there who,  
7 of course, design, build, install, operate, but  
8 don't own. And there are more companies in this  
9 third-party model coming into the marketplace all  
10 the time.

11 Had the issues of the state's debt over  
12 the exit fee cases and the regulatory and rate  
13 issues been resolved three years ago when our  
14 company opened its doors, we would have had 100  
15 times the amount of megawatts in operation and  
16 construction. That's the number of customers  
17 and/or contracts that were not signed as a result  
18 of that uncertainty.

19 And that's consistent with the 30 or so  
20 organizations we work with through our clean DG  
21 coalition in California.

22 So we believe that -- and what we're  
23 hearing from members of the Silicon Valley  
24 Manufacturing Group, companies of the California  
25 Manufacturing and Trade Association, and other

1 end-user groups that there is a significant, pent-  
2 up demand and desire to participate with  
3 distributed generation; and will, if the  
4 appropriate decisions and rules are made in a fair  
5 and balanced way.

6 And second, in an area of capacity, just  
7 in the growing area of digesters, which is -- and  
8 I'm saying this particular piece because I just  
9 came from the Central Valley last week. There are  
10 1.9 million head of milk-producing cattle in  
11 California, which equates to about 100 megawatts  
12 of electricity generation just off the methane  
13 from what digesters can produce.

14 Coupled with cogeneration onsite at  
15 dairies, that same amount of head of cattle could  
16 produce in excess of an additional 100 megawatts  
17 in capacity payment or export back into the grid  
18 as part of procurement.

19 What stands in the way of that dairy  
20 production being translated into electricity  
21 production are rules, or lack of rules, or  
22 certainty. That is one area that can both address  
23 the significantly increasing problems in air  
24 quality in California and the Central Valley, but  
25 also can go to specific, cost effective, important

1 electricity, least cost procurement decisions.

2 And so I would urge you to really look  
3 more closely at how you're looking at self  
4 generation.

5 Thank you.

6 CHAIRMAN KEESE: And I'll just say  
7 you're going to have to repeat that again for us,  
8 because what we're doing here today is  
9 establishing a baseline. And --

10 MS. SAVILLE: I'm going to provide  
11 written comments.

12 CHAIRMAN KEESE: Yes. Once we get the  
13 baseline then clearly I know energy efficiency  
14 will be one of the things we will discuss. What  
15 recommendation would we make on a policy level for  
16 energy efficiency. What would we make perhaps for  
17 distributed gen or the specifics you're talking  
18 about.

19 That'll be in our policy discussion.

20 MS. SAVILLE: Thank you.

21 PRESIDING MEMBER BOYD: But it is a very  
22 relevant issue. I mean even I was going to ask  
23 the staff or the panel to comment on, for  
24 instance, staff scenario three, which was lean and  
25 green. Said that business would focus on risk

1 management, cost competition leading to increased  
2 investment in distributed generation and energy  
3 efficiency.

4 Now, just taking distributed generation,  
5 I was going to ask, but I think the last commenter  
6 put the question on the table, does anybody have a  
7 view that in today's environment, regulatory and  
8 otherwise, that there is any chance of increased  
9 investment by our business sector in distributed  
10 generation?

11 But I think she's put the question very  
12 well.

13 MS. MARSHALL: Yeah, well, I think that  
14 scenario three is an optimistic about the  
15 regulatory environment. It is assuming that we  
16 have a regulatory framework that supports, or at  
17 least is neutral to DG. And, no, we're not there  
18 yet. I think it's a useful "what-if".

19 PRESIDING MEMBER BOYD: And I guess we  
20 policymakers have to grapple with the  
21 probabilities of certain of these things happening  
22 or not happening.

23 MS. MARSHALL: Well, on the other hand,  
24 it can be used to illustrate the benefits of how  
25 much could we get if we went down this path. What

1 would our resource needs look like.

2 PRESIDING MEMBER BOYD: I agree and  
3 that's probably a responsibility of ours, too, to  
4 point out to those to whom we have to submit this  
5 report, those kinds of possibilities.

6 MR. KELLY: Steve Kelly again with  
7 Independent Energy Producers. I just wanted to  
8 respond to the notion of what was just discussed,  
9 the uncommitted energy efficiency or DSM or  
10 whatever.

11 And in my mind we need to be careful, as  
12 a state, when we're looking at uncommitted DSM,  
13 uncommitted generation, uncommitted population  
14 increases when we're doing planning.

15 I understand that there's a potential  
16 for energy efficiency which is apparently this  
17 energy report talks about 10,000 megawatts or  
18 whatever, which is very good. And that should  
19 probably be driving the planning process, the  
20 programmatic process where you put money to try to  
21 achieve those ends.

22 But from developing a plan for resource  
23 procurement and resource adequacy my  
24 recommendation is that we try to focus as strongly  
25 as we can on what we know, or have a good

1 probability of being there, the committed part of  
2 the thing.

3 Because the uncommitted piece, if it  
4 doesn't show up, we end up down the road with  
5 being resource inadequate, or high probability of  
6 that, and we have problems in the energy sector.

7 So, as we develop the baseline and we  
8 develop the scenarios off those baselines, we need  
9 to separate the potential from what we feel has a  
10 pretty good likelihood of actually being there.

11 And my sense on listening to the  
12 discussion on there was that dollars drive a lot  
13 of the energy efficiency penetration rates. And  
14 the dollars are going to be known in the future.  
15 They're not really known now. But that  
16 penetration rate is going to be a function of  
17 decisions that are going to be made over the next  
18 five years.

19 And I strongly support energy  
20 efficiency, but in terms of planning for a  
21 resource outlook over the next five, particularly  
22 over the next five years, which is what the  
23 utilities are doing at the Public Utilities  
24 Commission, we need to focus on what we think is  
25 going to be there of committed, in order to match

1 the needs with what's the demand that's going to  
2 be there. Just an observation.

3 Thank you.

4 MS. MARSHALL: Any other commenters?  
5 Questions?

6 PRESIDING MEMBER BOYD: How about the  
7 business community there, somewhere in the  
8 audience? Any reaction to the discussions of the  
9 morning, so far? This is an informal, allegedly,  
10 gathering. Please have at it.

11 CHAIRMAN KEESE: Everybody likes the  
12 forecast? Or do we have to give you lunch to  
13 decide? I should say the baselines here that  
14 we've done a pretty -- what I hear is that the  
15 staff has done a pretty solid job with a few  
16 tweaks of comments.

17 Is that the general consensus of the  
18 audience?

19 MS. EBKE: Maryam Ebke with the  
20 California Public Utility Commission. I just  
21 wanted to note that in our ruling for our  
22 procurement proceeding we have specified that we  
23 would like the utilities to incorporate energy  
24 efficiency, cost effective energy efficiency,  
25 demand response and distributed generation in

1       their long-term procurement plans. So that's  
2       something that we expect to see from the utilities  
3       when they file April 1st.

4               So, I'd like to mention that we expect  
5       to see an increase in that.

6               CHAIRMAN KEESE: Thank you.

7               PRESIDING MEMBER BOYD: We'll cross our  
8       fingers. Anybody want to comment more on the gas  
9       piece of this? I mean, there was one comment  
10      about gas and gas prices. I, for one, am very  
11      concerned about gas, the gas situation. I don't  
12      know if PG&E has any comments or SDG&E or anyone  
13      else.

14              But to me that's a very worrisome thing.  
15      I think the staff draft, to date, has cautiously  
16      approached the situation. I know from talking to  
17      staff they're digging more deeply and there'll be  
18      more to follow in future discussions. But I, for  
19      one, am extremely concerned about the gas  
20      situation, the supply, price, et cetera.

21              MS. BAKKER: Well, on that score, at  
22      least one of the things that I noticed in here was  
23      that the retail gas price is listed here, but I'm  
24      not clear on what the commodity charge portion of  
25      that retail price is. I see Bill Wood there. He

1 might be able to help you.

2 MS. MARSHALL: We have to get our gas  
3 people to comment on that.

4 MR. WOOD: I'm Bill Wood with the Energy  
5 Commission. I was hoping just to sit and listen.  
6 With regards to the commodity component for the  
7 residential sector, the commodity component is  
8 probably \$3 to \$3.50 less than the unit price that  
9 is provided; that's in dollars per million Btu.  
10 For the commercial sector it's probably a buck or  
11 better less than. Same way with the industrial  
12 forecast.

13 And then, of course, we haven't been  
14 talking at all today about the electricity gas  
15 demand for power generation. That hasn't come up  
16 at all today. All the forecasts for gas that have  
17 been indicated today have just been for the retail  
18 portion or the res/commercial/industrial.

19 And as Commissioner Boyd has indicated,  
20 we do have great concerns with regards to what is  
21 happening for natural gas. I was amazed to see  
22 that prices have rocketed during this last week  
23 somewhat due to, I think, the unanticipated,  
24 unforecasted cold that has continued to occur  
25 within the eastern portion of the nation. And

1 driving up natural gas demand there, to some  
2 extent greater than the abilities for the  
3 utilities to, and the pipelines to meet.

4 In addition, storage has been drawn down  
5 heavily during this last winter to offset prices.  
6 And so we're going into this cold snap that could  
7 very well extend for 20 days to several months,  
8 from what I was reading this morning, with low  
9 inventories, at least on the east coast, with  
10 regards to storage.

11 So, that was response to the young lady  
12 who spoke earlier with regards to prices being so  
13 high here more recently. That's one of the  
14 drivers in that. We don't know how long that's  
15 going to last, and whether it's an indication of  
16 inadequate supply or just the very high demand,  
17 given the pipeline constraints.

18 We went through, in California, the same  
19 sort of thing several years ago, as you remember,  
20 where prices here went very very high. Supply was  
21 available, it was just that we just couldn't get  
22 it here because the pipes were running full.

23 So, anyway, I probably extended more  
24 than what you were looking for, but, thank you,  
25 Commissioner.

1           PRESIDING MEMBER BOYD: Thanks, Bill. I  
2 wanted somebody to put on the record the fact that  
3 I know, since we in the Governor's Natural Gas  
4 Working Group, every two weeks grill Bill and  
5 everyone else in the state that has anything to do  
6 with gas on what's going on.

7           There is a high degree of concern on  
8 this subject, which will be reflected presumably  
9 in this report unless things change.

10          Yes, sir.

11          MR. PRUSNEK: My name's Brian Prusnek  
12 and I'm also from the California Public Utilities  
13 Commission. And I work in the energy division in  
14 the natural gas section.

15          And I would echo your concerns about  
16 natural gas and the very limited talk that it has  
17 gotten today. In 2002, as you would have seen  
18 from your natural gas working group, prices were  
19 around \$2 at the California border at this time of  
20 year, whereas now they're around \$5.50, pushing  
21 the \$6 ceiling.

22          And that was something that we saw, as  
23 Bill said, when the capacity just wasn't there in  
24 California. We have the ability to receive the  
25 gas, but there were certain actions by interstate

1 companies that were preventing that natural gas  
2 from getting to California.

3 What we're seeing now is a general shift  
4 in the capacity rights of interstate capacity  
5 holdings. So there's a lot of growth in, for  
6 example, east of California markets where there's  
7 power generators being built there. And the  
8 natural gas is going to those power generators  
9 rather than being delivered to California. And  
10 you're seeing the holdings on the interstate  
11 capacity pipelines being given to those east of  
12 California shippers.

13 So, instate we have the ability to  
14 receive the natural gas. And that hasn't changed.  
15 But in the interstate pipelines the CPUC is very  
16 concerned about the capacity holdings, especially  
17 for the fact that core is usually taken care of in  
18 the states, but noncore is kind of left to the  
19 market. And given the recent decrease in  
20 marketers serving California, we're wondering  
21 who's going to put forth the money for potential  
22 energy expansions.

23 Also I would echo Bill's concern about  
24 the lack of attention instate generation of  
25 natural gas-fired generation has received. Yes,

1 we did look at the residential. And projecting  
2 out to 2013 you see the variation in between \$4 to  
3 \$6 for prices of residential. But that doesn't  
4 take into account, potentially that may be wrong,  
5 the increased demand by natural gas-fired power  
6 generators. And natural gas-fired power  
7 generators have a large impact on the price of  
8 natural gas; and could push that annual average up  
9 quite a bit. And that could be very problematic.

10 Also the increased peak needs. We saw a  
11 very mild winter last year, and we're getting back  
12 to normal conditions. So, that incremental  
13 heating load is coming back on, and storage is  
14 being used to fulfill that incremental heating  
15 load. And we're wondering what, you know, what  
16 needed expansions in storage need to happen in the  
17 future, as well. That's something that hasn't  
18 been given much attention.

19 We say we could build expansions in  
20 pipeline in your reports, but nothing is projected  
21 saying potentially we need more natural gas  
22 storage, and is there some push we should be  
23 putting on the utilities to expand their storage.

24 But that's also a problem concerning the  
25 noncore aspect of that. Nobody's there in that

1 market anymore to put the money forth to build  
2 more storage expansions.

3 And also to go back to my initial  
4 comment about the price. The pipes were running  
5 full back in the time when we were seeing these \$2  
6 prices and things like that, \$3 prices last year.  
7 And currently if you look at the receiving of PG&E  
8 and SoCalGas, for example, their pipes aren't  
9 running full anymore. And on the interstate  
10 pipelines it's not running full, as well. Yet  
11 we're seeing these astronomical prices in the  
12 State of California.

13 So, something else is going on here.  
14 And I'm pretty sure it's going to have long-term  
15 impacts. I haven't been able to put my finger on  
16 it, as to what the problem is right now. But it's  
17 definitely a concern at the CPUC, the rising  
18 natural gas prices.

19 And to the extent natural gas prices are  
20 rising, we have demand side management in  
21 electricity, but we don't have a corollary in  
22 natural gas.

23 Thank you.

24 PRESIDING MEMBER BOYD: Thanks.

25 MR. ALVARADO: I just wanted to add,

1       since there has been questions about natural gas,  
2       the studies that staff has done and presented so  
3       far on demand and what we'll be discussing  
4       tomorrow is really just the first phase as our  
5       initial building blocks.

6               We will be engaged in further studies  
7       about supply adequacy for electricity and, as you  
8       said, it does significantly add to the gas demand.

9               And so further down the line we are  
10       expecting to have an integrated risk for natural  
11       gas infrastructure in gas price forecasts. That  
12       will be another staff draft report. We're  
13       anticipating that will be released sometime in  
14       mid-April for another Committee workshop towards  
15       the end of that month.

16              So, we haven't covered everything yet,  
17       but you know, we're on our way. This is just the  
18       first step.

19              PRESIDING MEMBER BOYD: Thanks, Al.  
20       Susan, I think, had a question.

21              MS. BAKKER: Yeah, as I was reading the  
22       report on the demand forecasts, your description  
23       of the scenario sounded fairly assertive, like  
24       here's what you are going to do. And yet we have  
25       a question here about what are the greatest

1       uncertainties and what variables should we look  
2       at.

3               And I wanted to say that I think the  
4       Commissioners care about that question, whether  
5       what you've declared are the adequate  
6       sensitivities or whether there are some other ones  
7       that are important to take into account, so.

8               MS. MARSHALL: Yeah. What I've  
9       discussed is just staff's proposal and it's  
10      focused mostly on what would be useful economic  
11      scenarios. So we're certainly open to any  
12      comments on other issues that we need to focus on.  
13      Absolutely.

14              PRESIDING MEMBER BOYD: Okay, any other  
15      comments, questions?

16              Okay, per our agenda, it's about time to  
17      break for lunch. Maybe some of you will think of  
18      some questions during lunch, and then we'll take  
19      up where we left off, after lunch, as the agenda  
20      indicates.

21              However, if you come back with no  
22      additional questions, I guess we'll accelerate  
23      this workshop and move into the next subject area.  
24      But I encourage you, I mean we need to hear  
25      questions, comments, thoughts as preliminary

1       beginnings of quite a discussion and debate.

2               So, let's come back in a little over an  
3       hour, if you can; 1:15. I know how tough it is  
4       finding lunch around this neighborhood.

5               (Whereupon, at 12:03 p.m., the workshop  
6       was adjourned, to reconvene at 1:15  
7       p.m., this same day.)

8                       --o0o--

## 1 AFTERNOON SESSION

2 1:21 p.m.

3 PRESIDING MEMBER BOYD: First, let me  
4 ask if over lunch anyone came up with any  
5 additional comments, questions or otherwise that  
6 they want to bring to our attention on this  
7 morning's deliberations over the preliminary  
8 demand forecasts.

9 Looks like we just saved an hour of  
10 today's agenda already. Then, unless I'm  
11 mistaken, it's time to move on to the second  
12 subject of today's workshop, which is a discussion  
13 of California investor-owned and municipal  
14 utilities retail electric price outlook draft  
15 report.

16 And with that, Al, back to you and  
17 staff.

18 MR. TAVARES: My name is Ruben Tavares.  
19 This afternoon we're going to have two  
20 presentations. One on investor-owned utilities  
21 retail price forecasts; and the second  
22 presentation will be on municipal rate forecast.  
23 Can you hear me well over there in the back?  
24 Good.

25 The staff of the Energy Commission

1       prepare the first draft of the retail price  
2       forecast; most of the estimates that we did were  
3       done back in November, December last year. Our  
4       figures, again, are a little bit old, but we are  
5       currently updating most of our forecasts.

6               Today we want to discuss why do we make  
7       electricity rate projections. Want to describe  
8       what we call a typical IOU customer. We also  
9       going to present how we derive our present rates.  
10      Present rates are baseline to forecast our rates  
11      in the future.

12             Then we're going to make our  
13      projections. I'll describe how we did our  
14      projections both for the generation costs and the  
15      nongeneration costs.

16             And finally we want to discuss our  
17      results.

18             Now what do we mean make rate  
19      projections. Well, first of all, let me start  
20      with the definition here so we don't get confused.  
21      When we talk about rates, we talk about average  
22      prices, average revenue to the utility, same as  
23      the average cost to the customer. Is really the  
24      average cost, the average revenue, per kilowatt  
25      hour to a customer.

1           Also when we talk about projection we  
2       either say we have an outlook or we made a  
3       forecast or we estimated some of those rates. So  
4       we're talking about the same thing.

5           Now, this projection is only one  
6       scenario, and the right one, the only one.

7           (Laughter.)

8           MR. TAVARES: The correct one. No, this  
9       is only one scenario. There's hundreds of  
10      scenarios.

11          If I were able to make the right  
12      projection here today I'm pretty sure I would get  
13      some offers, but I don't think it's going to  
14      happen.

15          Now, electricity rate projections are an  
16      input; we use rates for different purposes around  
17      the Commission and outside the Commission. For  
18      instance, our demand forecasts that you witness  
19      this morning includes our rate projections. And  
20      you saw the impact that they described on the  
21      rates. So it is important that we have at least  
22      good approximation of what the rates are going to  
23      be in the future.

24          We also use rates for the building  
25      standards that will develop here at the Energy

1 Commission for Title 24.

2 Electricity rates are used for cost  
3 benefit analysis of cogeneration projects, energy  
4 efficiency. We get phone calls all the time.  
5 It's a very popular product that we develop here  
6 at the Commission.

7 Rates are also used as an input to the  
8 budgets of many public agencies. Again, we get  
9 calls quite often for that.

10 And, again, just other uses for the  
11 rates, consultants, students, professors, they  
12 call us all the time for our forecast.

13 Now, what is a typical customer.  
14 Typical customer that we chose to represent the  
15 five different customer classes are described in  
16 this table, table 1. We got most of this  
17 information from PG&E and Edison, FERC Form 1.  
18 For instance, for residential customer we have  
19 assumed that a customer will consume about 500 kWh  
20 per month.

21 I know that for some utilities it might  
22 not be 500. For instance, San Diego might be a  
23 little bit lower than that, 480 or so. For PG&E  
24 might be a little bit higher. We did some  
25 estimates, our staff did some estimates,

1 themselves, and they are a little bit higher, you  
2 know, 530, 540 kWh per month. But I guess for  
3 simplicity we just assumed that this is a typical  
4 customer.

5 We also used PG&E's load profiles to  
6 develop, you know, the maximum demand for a  
7 typical customer. And also to develop the load  
8 factors that we use in order to estimate our  
9 rates.

10 There are numerous rate schedules. The  
11 three utilities, as you know, they have many rate  
12 schedules that apply to either residential  
13 customers or small commercial customers. In  
14 general, for instance, for PG&E residential  
15 customers have up to 30 different rate schedules.  
16 So we cannot -- we probably could, but we, for  
17 simplicity, chose only this written schedules that  
18 you see there to represent each customer class.

19 For instance, consumption -- the reason  
20 we chose those rate schedules is because most of  
21 the consumption occurs on those rate schedules.  
22 For instance, E-1 G&E, the consumption if about  
23 80 -- about 80 percent of the consumption occurs  
24 in E-1.

25 Another one, GS-1 for some in Southern

1 California Edison, for small commercial customers,  
2 99 percent of the consumption occurs in that rate  
3 schedule.

4 So, that was our rationale; and again,  
5 we welcome any kind of comments that you have  
6 about our processing, how we chose the rate  
7 schedules to represent the customer classes.

8 Again, present rates are just the  
9 average revenue per kWh. In the rates we took all  
10 the charges to the different customer classes.  
11 For instance, for residential we include the basic  
12 charge, the energy charge in kWh, and cents per  
13 kilowatt hour.

14 And in this case, for instance, in table  
15 3, we have the Edison residential rate just for  
16 tier 1; this is the baseline. It is about 300 kWh  
17 per month. This is the allowance to this  
18 residential consumers. And you can see all the  
19 different charges that we took again from Edison's  
20 website. This is what they have the schedule and  
21 the rates.

22 One thing that you might notice is that  
23 the generation charge for baseline in the summer  
24 is about 13 cents per kilowatt hour. Actually is  
25 the same for the winter and the summer. So they

1 don't have -- generation charge is the same, but  
2 you go to the next slide, tier number 5, the  
3 generation charge almost double, from 13 to almost  
4 26 cents per kilowatt hour. That's the difference  
5 between all the charges.

6 And, again, we consider the five  
7 different tiers to develop present rates for  
8 residential customers.

9 And the next slide you can see the  
10 average residential rate, again for the same  
11 utility, Edison. Overall customer pays about 13  
12 cents per kilowatt hour. Again, that takes into  
13 account the 10 percent rate reduction that was  
14 approved back in 1998; it takes into account all  
15 the different charges.

16 One interesting fact, for instance this  
17 charge over here is the PUC charge. And I notice  
18 in the last application by Southern California  
19 Edison, they increase the charge; was a proposal,  
20 obviously, to increase the charge from 1.2 mills  
21 to 3.1 mills. I don't know what the reason is,  
22 but I would like to find out. Maybe they tried  
23 to, maybe the PUC does not have enough revenues to  
24 fund their staff, or something like that.

25 Okay, we follow the same process for

1 each and every customer class. All the rates have  
2 charges for energy surcharges, demand surcharges,  
3 customer, energy and meter charges. So we average  
4 all the charges to the customers.

5 You look at the chart you can see that  
6 the IOUs list the rate components differently.  
7 For instance, Edison includes a surcharge in the  
8 generation costs, but PG&E does not. PG&E  
9 separates the surcharge. So when you look at the  
10 tariffs, even though in Edison's they are not  
11 separated, the generation charge really includes  
12 also the surcharges.

13 Now, projections. First of all the  
14 staff made some assumptions. The first big  
15 assumption is that the CPUC will keep this same  
16 rate structure as it is today. It's a structure  
17 that was approved back in 2001.

18 And that is that all the revenue is  
19 allocated in the same proportion to customer  
20 classes and rate schedules as it is today. It's  
21 very hard to predict what the PUC's going to do as  
22 far as the allocation of these revenues.

23 We know, for instance, that Edison  
24 already applied to the PUC to change the tiers for  
25 residential customers. They wanted to reduce the

1 tier from five to three. So, again, this is an  
2 application that is currently at the PUC, and  
3 we'll see what happen there. But we made this  
4 assumption.

5 Another assumption that we made, and  
6 this is a big assumption, is that Edison, PG&E and  
7 San Diego will finish over-collecting money in the  
8 rates right now. And we assume that surcharges  
9 will end in 2003. We know again that for Edison  
10 it is probably true, they already applied to the  
11 PUC, to reduce the rates and to end the surcharges  
12 effective, I think, July 1st.

13 San Diego, my understanding is also that  
14 they are planning to do that. And PG&E is the big  
15 question mark. Again, because PG&E is currently  
16 in bankruptcy proceedings.

17 Thereafter, you know, rates reflect only  
18 the generation and the nongeneration costs of  
19 service.

20 Now, how do we project the generation  
21 costs. And this area I'm going to need a little  
22 bit help here from David, David Vidaver. We  
23 projected our components of generation costs which  
24 include utility retained generation, that is  
25 nuclear and hydro. The utilities still have those

1 resources.

2 We also estimated the DWR costs. That's  
3 the contracts that DWR has to provide energy to  
4 the utilities. We projected our renewable  
5 portfolio standard amounts and costs. And also  
6 the spot market purchases for the next ten years.

7 This is just an example of DWR  
8 contracts. This projections include fixed must-  
9 take costs for PG&E, Edison and San Diego Gas and  
10 Electric for only four years. Then we did it for  
11 the full ten years, but for simplicity we are just  
12 presenting four years here.

13 The second area of the table here  
14 presents the fixed must-take energy. And again,  
15 it doesn't include dispatchable energy. And right  
16 here at the bottom we have fixed dispatchable  
17 costs.

18 This is DWR average energy cost per  
19 megawatt hour. And again it includes only fixed  
20 must-take energy and costs. And we have in this  
21 table only for nine years, but however in our  
22 forecast we did it for the full ten years.

23 Again, our forecast reflects the 2003-  
24 2010 PG&E energy resource outlook. As you can  
25 see, again, you know, this forecast was done back

1 in November. But we have the DWR contracts, you  
2 go all the way to 2010, they decline considerably.  
3 And then we have very very sharp increase here on  
4 the net short. And again, I think David can  
5 explain a little bit better than I can.

6 This figure represents, it shows the  
7 2004 PG&E energy resources outlook. And we have,  
8 for instance, the net short is about 12 percent.  
9 But, again, this includes also part of the  
10 dispatchable energy by DWR. So this portion over  
11 here includes only the must-take energy by DWR.

12 Overall we have estimates the average  
13 energy -- weighted average energy cost for 2003 to  
14 2013 for the three utilities to be in the  
15 neighborhood of about 5.5 to 7 cents per kilowatt  
16 hour. And again this is weighted by the amount of  
17 energy that they purchase, the DWR contracts or  
18 the amount of energy that they have.

19 For instance, their hydro is very cheap;  
20 their nuclear is also not as expensive. So  
21 everything is weighted over here.

22 For the nongeneration costs we just  
23 increased those charges by inflation. Again,  
24 there were several proposals for -- San Diego has  
25 a proposal for a new transmission line by the

1 Rainbow. We did not include that.

2 We are aware that this charge over here,  
3 the TTA charge, will expire in 2007. This is the  
4 charge of the -- to redeem the bonds that were  
5 issue back in 1997, 1998 to pay for the 10 percent  
6 rate reduction that the customers, residential and  
7 small commercial customers, got. But this will  
8 expire in 2007.

9 The 10 percent rate reduction we assume  
10 that it will expire at the end of this year.

11 The next three tables represent samples  
12 of our results. And, again, as you can see, we  
13 are assuming that the surcharges for PG&E here  
14 will be gone in 2004. You can see for medium  
15 commercial customer they are very substantial.  
16 They're almost 5.5 cents per kWh. And, again,  
17 they are not the same for the different customers.  
18 Some customers have a lower surcharge.

19 This is Edison's. Again, I mentioned  
20 before, the generation charge includes the  
21 surcharges. So you can see the difference between  
22 2003-2004 where the surcharges are not included  
23 anymore. And, again, we're assuming that in 2003  
24 and 2004 '5 and beyond, their rates will include  
25 only the cost of service.

1           Finally we have San Diego Gas and  
2   Electric, the same thing. Because surcharges are  
3   very small, the charges that San Diego has, we see  
4   a multiplying the generation charge here. But  
5   still is going to be a decline. That's what we  
6   are forecasting.

7           Finally, we have some questions there.  
8   And, again, it's hard to read, but the very first  
9   four questions are related to our methodology. If  
10  anybody has questions of the methodology, what do  
11  you think of our methodology, development of our  
12  present rates, and also our future rates.

13           Questions 5, 6 and 7 relate to  
14  regulatory agencies, what do you think about  
15  regulatory process in the future.

16           And finally, the last three will refer  
17  to business and competition instate.

18           So with that, if you have any questions,  
19  actually I would like to call Jeff Nahigian -- is  
20  he -- do you want to sit over here so we can have  
21  a panel discussion.

22           MR. NAHIGIAN: Sure. Do we have anybody  
23  accompanying me or --

24           MR. TAVARES: Yes. We have Gary  
25  Schoonyan. Anybody else would like to

1 participate? Come on, you guys, you can crucify  
2 me. This is an informal workshop.

3 MS. JONES: Ruben, before we go on --

4 MR. TAVARES: Sure.

5 MS. JONES: -- can you answer just a  
6 couple questions?

7 MR. TAVARES: Um-hum.

8 MS. JONES: Back on slide 11 you talked  
9 about the generation cost component and figuring  
10 out the retail rates. And you have included the  
11 cost of the renewable portfolio standard plus the  
12 spot market purchases.

13 I'm wondering if you can describe the  
14 methodology that you used to determine the amounts  
15 and the costs associated with meeting RPS  
16 obligations?

17 MR. TAVARES: Okay, well, the RPS  
18 actually we did not develop the price. We just  
19 assumed the 5.37 cents that has been discussed at  
20 the PUC for RPS. So we have not developed that.

21 For the amounts, maybe David can add a  
22 little bit on that?

23 MR. VIDAVER: David Vidaver,  
24 V-i-d-a-v-e-r. We took the required amount of  
25 generation that would have to be produced under

1 the RPS targets, assuming the targets were met. I  
2 assumed the utilities would reach those targets in  
3 a relatively smooth fashion unless contracts  
4 signed under the NR procurement proceeding for  
5 2003 indicated that they would exceed those  
6 targets.

7 I think if I went into any more detail  
8 about the 2003 procurement you'd have to shoot me.  
9 So, they're really no specifics I can provide you  
10 regarding that.

11 As far as the QFs are concerned, we  
12 basically took historical generation levels  
13 through the QFs and did not assume that QFs were  
14 falling off the cliff. Because we don't have that  
15 kind of information available to us.

16 MS. JONES: Thank you.

17 MR. TAVARES: Okay, Jeff, do you have  
18 any comments, critiques?

19 MR. NAHIGIAN: Sure. Hi, my name is  
20 Jeff Nahigian and I'm with JBS Energy in  
21 Sacramento here. And I'm here on behalf of The  
22 Utility Consumer Action Network in San Diego. And  
23 actually it's specifically on behalf of Michael  
24 Shames who has asked me to read a statement that  
25 he has, actually, on the Energy Commission's

1 retail forecast, retail electric price forecast.

2 "On behalf of UCAN I thank the Commissioners  
3 and staff and the rest of you folks for  
4 inviting us to comment today upon the draft  
5 retail electric price outlook report. My  
6 comments will be focused on the report as it  
7 relates to San Diego's rates. And as UCAN  
8 represents residential and small business  
9 customers, I'll further focus on those  
10 specific customer class forecasts. We'll  
11 comment today on the accuracy of the  
12 forecasts and the importance of the  
13 forecasts.

14 "The retail rate outlook for residential and  
15 small business customers is generally  
16 accurate. The nominal cents per kilowatt  
17 hour is consistent with our calculations.  
18 San Diego Gas and Electric will likely argue  
19 that average consumption of customers in San  
20 Diego is lower than the assumed 500 kilowatt  
21 hours per month.

22 "This is partially true as San Diego's  
23 climate is milder than the other areas in the  
24 state. However, that lower number is also  
25 skewed by disproportionately large number of

1 part-time residents in small coastal  
2 dwellings in the region. We found that the  
3 average San Diego homeowner and full-time  
4 residents likely to experience a monthly 500  
5 kilowatt hour per month consumption. Thus,  
6 we do not take issue with that underlying  
7 assumption, not from what the staff has  
8 provided.

9 "We do have some difficulty with the  
10 projected 4 to 5 percent rate decrease  
11 projected for San Diego small business and  
12 residential customers, respectively, in 2004.  
13 The factors that will take for that kind of  
14 rate decrease are not immediately apparent to  
15 us. We know that San Diego is seeking a 3.3  
16 percent and 3.7 percent rate increase for  
17 small business and residential customer  
18 classes, and are seeking that increase to go  
19 into effect in early 2004.

20 "Second, we have reason to believe that to  
21 the extent that DWR costs will be reduced for  
22 the utilities, Commission decision 02-12-064  
23 suggest that any rate reduction is likely to  
24 be applied to San Diego's AB-265 balancing  
25 account, which at the end of 2002 stood at

1 around \$215 million. Thus, that would not  
2 account for any reduction in the rates in  
3 2004. The earliest we're seeing a  
4 foreseeable rate reduction in San Diego is  
5 2005.

6 "Regardless of the effect of the GDP  
7 deflators included in the forecast, the rate  
8 increase sought by San Diego and the  
9 existence of the AB-265 under-collection  
10 suggests that the disparity between San  
11 Diego's residential rates and those charged  
12 to Edison and PG&E residential will be even  
13 higher than forecast. San Diego's  
14 residential customers will likely be lucky to  
15 have rates that are only 17 percent higher  
16 than PG&E's, and 10 percent higher than  
17 Edison's. The disparity in 2004 will likely  
18 be closer to 21 percent and 14 percent  
19 respectively.

20 "That raises the second major issue that we  
21 bring to you. We appreciate the fact the  
22 Commission has conducted this rate  
23 forecasting exercise. It's information that  
24 San Diego has steadfastly refused to provide  
25 us. In our formal request for electric rate

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cost

9 IOU in the state may be more of a prolonged  
10 sentence than a short visit.  
11 "This fact should have resonance with this  
12 Commission as well as the other Commission in  
13 San Francisco. It says in a nutshell that  
14 San Diego needs your help. We view this  
15 forecast as the regulatory equivalent of the  
16 ghost of Christmas Future. It reveals a  
17 picture of what could happen if San Diego  
18 remains on its current track.  
19 "However, it is a future that could be  
20 altered with help from this Commission and  
21 from the state. San Diego needs to focus its  
22 efforts on reducing its energy costs and  
23 improving its demand side responsiveness and  
24 energy efficiency. There's some 3.5 million  
25 people who would tell you, if they could,

1           that the prospects of having 14 to 21 percent  
2           higher electric rates than the rest of the  
3           state is unacceptable; and will look to you  
4           to help make this fairly accurate forecast as  
5           wrong as humanly possible."

6           Thanks for listening. I'll try and  
7           answer whatever questions I can.

8           MR. TAVARES: Anybody from San Diego  
9           would like to make a statement about that? We  
10          don't have anybody from San Diego?

11          UNIDENTIFIED SPEAKER: We have someone  
12          coming en route from San Diego; should be here  
13          shortly.

14          MR. TAVARES: Oh, okay. Gary.

15          MR. SCHOONYAN: Gary Schoonyan, Southern  
16          California Edison. And this will be extremely  
17          brief.

18          As demonstrated by Ruben's presentation,  
19          I mean there are a whole lot of assumptions that  
20          go into play in developing any sort of a rate  
21          forecast. However, realizing that, and reviewing  
22          the basic assumptions and what-have-you, I mean  
23          from our perspective we believe that the forecast  
24          for Edison is reasonable. Leave it at that.

25          MR. TAVARES: You're my friend.

1 (Laughter.)

2 PRESIDING MEMBER BOYD: Does Ruben have  
3 any other friends or enemies?

4 (Laughter.)

5 MR. TAVARES: This is an informal  
6 workshop. Anybody else? Yes.

7 MS. SAVILLE: For the record, again, my  
8 name is Tracy Saville. Just a question. Are you  
9 treating at all the new rate designs that are  
10 implied in the current rate design filings at the  
11 PUC? We have Edison's underway. We're soon to be  
12 expecting SDG&E's following and PG&E about six  
13 months after that.

14 How are you treating what we're seeing  
15 now in Southern California Edison's rate filing  
16 versus historical rate structures? Because  
17 there's significant differences.

18 MR. TAVARES: Yes, we're aware of the  
19 differences. We have not considered yet, you  
20 know, the new proposal, Edison's proposal, any  
21 proposal. We did our projections back in  
22 November, December last year.

23 So this is a first draft. Our next step  
24 is to consider all of those proposals including --  
25 PG&E's proposals and PG&E's outcomes. You know,

1       that's one of the things that we're lacking right  
2       now in our initial projection. We did not  
3       consider PG&E's bankruptcy developments. We would  
4       like to get there in our next draft.

5               DR. ARTHUR: Dave Arthur, City of  
6       Redding, Resource Planner. A couple of questions.  
7       One is not so much a question for you, but  
8       actually a question of the group this morning.

9               To the extent that your price forecast  
10       has declining prices, I would be interested to  
11       know to what extent those price changes have been  
12       reflected in the demand forecast.

13              And then the corollary would be there  
14       was a great deal of discussion this morning about  
15       some sort of inadequacy as it related to energy  
16       efficiency. And at least historically one of the  
17       strongest inducements to energy efficiency is  
18       price. And your presentation indicates that we've  
19       had a very strong inducement over the last two or  
20       three years.

21              And I guess a question would be how high  
22       would price have to get before we would have any  
23       sort of rational implementation of cost effective  
24       energy efficiency. And if the prices decline,  
25       it's hard to imagine that it's going to be easy to

1 get additional energy efficiency because people  
2 will have less rather than more incentive.

3 And so I guess as we think about the  
4 integrated plan, hopefully thought is going into  
5 how the dynamics between price, demand and  
6 application of efficiency are being integrated.

7 MR. TAVARES: As far as the rate  
8 forecast, I mean we provide the rate forecast for  
9 the demand office, and I think Lynn considered  
10 that, did you, Lynn?

11 MS. MARSHALL: Oh, yes.

12 MR. TAVARES: So, she did. I haven't  
13 done the studies, myself, on what the impact of  
14 elasticity of price on demand or what impact with  
15 efficiency. I mean if there's anybody here from  
16 the Efficiency Office that would like to make a  
17 statement on what the impact of the prices are,  
18 you know, I would invite them to speak. I know  
19 there's some here --

20 MR. NAHIGIAN: If I could just chime in  
21 here. I know that you folks -- there's another  
22 rulemaking going on at the Public Utilities  
23 Commission concerning advanced metering and  
24 dynamic tariffs.

25 And to some extent many proponents of

1 advanced metering have been also proponents on  
2 eliminating the residential inverted tier rates in  
3 favor of time-of-use pricing or what's called  
4 critical peak pricing in conjunction with some  
5 advanced metering.

6 And, you know, there's a state pilot  
7 program that's probably most likely to be approved  
8 by the Commission and you should have some demand  
9 response information about some pricing going on  
10 probably by the end of 2004.

11 But it brings up my other point, which I  
12 wanted to say is there may be some value to doing  
13 a sensitivity on some of the rates -- on doing  
14 some sensitivity with some of the residential and  
15 small commercial rates. Because there are  
16 proposals to install systemwide advanced metering,  
17 which is, you know, -- which could cost per  
18 utility somewhere between, you know, \$1.5 billion  
19 and \$2 billion.

20 And, you know, people are talking about  
21 trying to deploy that sometime in 2005 and 2006.  
22 And to the extent that that's, one, a very large  
23 revenue increase, and two, revenue that is  
24 normally allocated based on customer and therefore  
25 based and mainly paid for by the residential

1 class. We think it may be a good sensitivity for  
2 you to be able to run to see what those numbers  
3 might look like.

4 MR. TAVARES: Okay. Anybody else has  
5 any -- okay.

6 MS. BACHRACH: Hi. Devra Bachrach with  
7 the Natural Resources Defense Council, again.

8 I have a broad comment on both of the  
9 price outlook reports, and that is that we -- NRDC  
10 strongly urges the CEC to include forecasts of  
11 average customer bills by sector in these reports  
12 or in some other place in the IEPR in addition to  
13 the commodity price forecasts.

14 And while I think we all recognize that  
15 the commodity price forecasts are very important,  
16 in our own right, California has long recognized  
17 that utilities are fundamentally providing their  
18 customers with energy services, the light and the  
19 heat, rather than the actual commodities,  
20 themselves, for their own sake.

21 I think we heard most customers care  
22 more about the total amount that they have to pay  
23 for the energy services that they receive, their  
24 monthly bill, than about the actual rate of their  
25 electricity price.

1           For example, I think if you asked your  
2     neighbor how much they pay for energy they could  
3     probably tell you an average monthly bill, but  
4     probably could not tell you the actual rate that  
5     they pay for electricity or per therm.

6           So, while comparing commodity prices  
7     across the utilities or across states, or even  
8     historically, provides a lot of information, it  
9     provides an incomplete picture of customer  
10    satisfaction with the energy services that they're  
11    receiving.

12           And in SB-1389 that established this  
13    IEPR process, it requires a, quote, "evaluation of  
14    whether electricity and natural gas markets are  
15    adequately meeting public interest objectives,  
16    including the provision of low-cost, reliable  
17    services."

18           So we urge the CEC to insure that the  
19    forecast includes an assessment of average  
20    customer bills in order to get a more complete  
21    sense of how the utilities are meeting their  
22    customers' energy service needs.

23           Thank you.

24           MR. TAVARES: Actually that's exactly  
25    what we do. We consider all the different charges

1 in our rates. And, again, you know, when I  
2 defined rates I defined average prices, average  
3 revenue per kilowatt hour. So that's what we do.  
4 We actually estimate average cents per kilowatt  
5 hour including all the charges.

6 MS. BAKKER: But, Ruben, you also end up  
7 assuming what consumption rate the consumer you're  
8 estimating is, and so you could easily compute an  
9 average bill, which is what she was asking for, is  
10 a look at what the average bill would be.

11 MS. BACHRACH: Right, to clarify an  
12 average monthly dollar amount versus a cents per  
13 kilowatt hour. So you probably have the  
14 information in there, but it's not presented as an  
15 average bill. It's only presented as actual  
16 rates.

17 MR. TAVARES: Well, we have the  
18 consumption there, you know, what a typical  
19 consumer will, you know, -- kWh times the rate, or  
20 times the average price, and that will give you  
21 the total bill. And this is per month, 500 kWh  
22 per month. So that's exactly what we do.

23 I mean you --

24 UNIDENTIFIED SPEAKER: -- just wants you  
25 to add a table --

1 MR. TAVARES: Oh, okay. Sorry.

2 (Laughter.)

3 MR. ALEXANDER: Michael Alexander with  
4 Southern California Edison. This is a technical  
5 question, not anything else here.

6 MR. TAVARES: Okay.

7 MR. ALEXANDER: We saw in the  
8 presentation this morning that the average use per  
9 customer was expected to rise in California. And  
10 I was wondering how that was reflected in the  
11 different tiers that the utilities have in your  
12 price estimates.

13 MR. TAVARES: I didn't consider that. I  
14 mean not because I didn't want to, I wasn't really  
15 aware of. But, I will. I mean it's something we  
16 should consider.

17 MR. ALEXANDER: Thank you.

18 MR. SCHOONYAN: Let me jump in here,  
19 too, since I'm with Edison, as well. Is that as  
20 we mentioned this morning, the baseline forecast  
21 did not include additional energy efficiency and  
22 what-have-you. And it's our anticipation that the  
23 amount of consumption of the residential consumer  
24 based upon, you know, not just the existing PGC  
25 fund usage, but going beyond that will keep

1       whatever the actual energy usage per customer down  
2       at these levels.

3               And probably you wouldn't see the growth  
4       that's anticipated in the demand forecast.

5               MR. WAITMAN:  Chuck Waitman with Tesoro,  
6       again.  And just two questions.  Are the rate  
7       structures you're proposing here consistent with  
8       the natural gas prices that were in the central  
9       generation report, or are they consistent with, I  
10      think there was another earlier report published  
11      by the Commission.

12              MR. TAVARES:  David was saying there was  
13      an earlier report.

14              MR. WAITMAN:  The earlier report?  Okay.

15              MR. TAVARES:  Yeah, we're going to need  
16      to update those rates later on.

17              MR. WAITMAN:  Okay, and the second  
18      question.  It sounds like there's going to be a  
19      final report issued at a later date, and is that  
20      going to include some sensitivities with different  
21      natural gas pricing assumptions?

22              MR. TAVARES:  David is saying yes, so we  
23      will.

24              MR. WAITMAN:  Okay.

25              MR. TAVARES:  He's the boss.

1 (Laughter.)

2 MR. WAITMAN: Thank you.

3 MR. SKOWRONSKI: Mark Skowronski, Duke  
4 Solar. I may have missed some of the  
5 presentation, so if this is a redundant question I  
6 apologize.

7 But on page 13 of the presentation on  
8 the figure 1, you got the DWR average energy cost  
9 with the significant jump attributed to SDG&E in  
10 2007.

11 And then on page 16, figure 4, you show  
12 that the IOU weighted average cost for SDG&E going  
13 down in the same timeframe. I'm just wondering  
14 what the explanation for that was.

15 MR. TAVARES: Well, going to figure 4,  
16 the weighted -- the IOU weighted average energy  
17 cost, that includes all the energy, actually the  
18 prices are weighted by the energy coming from DWR,  
19 utility retained generation, spot market prices  
20 and so on.

21 And you go back to the previous graph  
22 and that was figure 1, I think David has the  
23 answer for that one. Right, David?

24 MR. SKOWRONSKI: On figure 1, for San  
25 Diego Gas and Electric, 2007, there's a very

1 significant increase on the energy cost resulting  
2 from the DWR contracts.

3 And then on figure 4 you see a  
4 relatively significant decrease relative to other  
5 utilities in the same timeframe, 2007, that shows  
6 the SDG&E average weighted cost going down.

7 That doesn't seem to jibe there.

8 MR. VIDAVER: Okay, I can't swear as to  
9 the reason for the discrepancy other than to say  
10 that the average DWR energy costs associated with  
11 a given utility is a function not only of the --  
12 it's a function of the relative weights of fixed  
13 price must-take energy and dispatchable capacity  
14 associated with the DWR contract for a utility.

15 So, for example, you're going to see a  
16 much higher price if, all else equal, if a greater  
17 share of the DWR contracts associated with a  
18 utility are for dispatchable energy. Because the  
19 average dispatchable DWR contract was for a heat  
20 rate of about 11,000 Btu plus \$26, which --

21 MR. SKOWRONSKI: Yeah, well, I'm not  
22 disputing -- that was actually my next question,  
23 but I'm just looking at the disparity of the  
24 graphs. It just seems intrinsic to me that  
25 relative to the IOUs you shouldn't have an average

1 weighted cost going down when a significant  
2 portion of your portfolio is going up.

3 MR. VIDAVER: I can't answer that  
4 question because I wasn't involved -- I was  
5 involved --

6 CHAIRMAN KEESE: Can you answer the  
7 question what percentage of San Diego is DWR in  
8 those years?

9 MR. VIDAVER: I know early on quite a  
10 substantial share of it is --

11 CHAIRMAN KEESE: But we're looking at  
12 2008 and '09 -- we're looking at '08 and '09.

13 MR. VIDAVER: Off the top of my head I  
14 can't tell you when the San Diego administered DWR  
15 contracts expire. I can't. My --

16 CHAIRMAN KEESE: Is it above a 25  
17 percent level?

18 MR. VIDAVER: That would be my guess,  
19 yes. At least in the early years. In the outer  
20 years I can't be sure.

21 CHAIRMAN KEESE: You've raised a very  
22 good question. It would seem to me if the average  
23 cost of San Diego is going down and the DWR cost  
24 is going up, the DWR portion has to be minor.

25 MR. VIDAVER: Well, I --

1 MR. KAMMERER: Kurt Kammerer from the  
2 San Diego Regional Energy Office. The DWR  
3 contracts in those outer years are a very small  
4 portion, less than 20 percent, I believe. So I  
5 think what you're seeing is a small amount of  
6 higher prices, a small amount of contracts likely.

7 MR. VIDAVER: Did he just rescue me?

8 (Laughter.)

9 MR. VIDAVER: Thank you. Okay.

10 MR. SKOWRONSKI: Actually, if I can  
11 follow up, I have a follow up question here.  
12 How's come SDG&E got screwed on the contracts near  
13 2007?

14 (Laughter.)

15 MR. SKOWRONSKI: Just kind of curious.  
16 These contracts were apportioned to each utility?

17 MR. VIDAVER: I would hesitate to make a  
18 definitive statement about why.

19 MR. SKOWRONSKI: Okay.

20 MR. VIDAVER: The ALJ --

21 UNIDENTIFIED SPEAKER: They were only  
22 buying one kilowatt hour; I wouldn't say they were  
23 being screwed.

24 MR. VIDAVER: Mr. Schoonyan would  
25 disagree with your comment, by the way, I imagine.

1 MS. EBKE: Maryam Ebke with the PUC. I  
2 have two questions. One is on the 10 percent rate  
3 reduction. What was your assumptions for that for  
4 disappearing in 2004?

5 MR. TAVARES: The 10 percent rate  
6 reduction?

7 MS. EBKE: Right.

8 MR. TAVARES: Well, I'm assuming that  
9 once, for instance in the case of Edison, they  
10 apply recently to the PUC for the new rate  
11 structure. I'm assuming that once they finish  
12 collecting, that the surcharges -- the PUC will  
13 actually reduce the 10 percent rate reduction.

14 But you are from the PUC and you have  
15 better information than I do.

16 MS. EBKE: I couldn't answer that  
17 question for you, but I just wanted to see what  
18 your assumption was based on.

19 MR. TAVARES: What is your understanding  
20 of the 10 percent rate reduction --

21 MS. EBKE: I'm not aware of anything out  
22 there for the 10 percent rate reduction, you know,  
23 going away. But I was just kind of wondering what  
24 your assumption was based on, so --

25 MR. TAVARES: Okay.

1 MS. EBKE: My second question is on the  
2 nongeneration costs for transmission revenues and  
3 maybe the IOUs can answer this, but my  
4 understanding is that the transmission revenues  
5 for PG&E at least in the past four or five years,  
6 and also for Edison have gone up.

7 In I think your report you say that it  
8 remains constant except for inflation, so.

9 MR. TAVARES: Well, that's my  
10 assumption, again, but if they have, we have a  
11 person here from Edison.

12 MS. EBKE: I think Edison had applied  
13 for two transmission revenue increases and I  
14 believe PG&E has applied for five or six in the  
15 past five, six years, so.

16 MR. SCHOONYAN: A couple things. First  
17 of all, the 10 percent rate reduction, if I recall  
18 that's actually written in statute, basically, the  
19 duration of that.

20 Now, to the extent the PUC desires to  
21 continue that, well, that's the PUC's decision.  
22 But I think the justification for that was that's  
23 what the law says, or at least what's written in  
24 the law as far as that reduction is concerned.

25 With regards to the transmission, I

1 can't get into the details on that. There were a  
2 number of various charges that were included in  
3 that that are being unbound. A lot of the grid  
4 management types of charges which we've seen being  
5 reduced over the last couple of years.

6 So that could be a result of that. But  
7 I would have to give you some additional  
8 information on that from Edison's perspective.

9 MS. EBKE: Okay. I just wanted to say,  
10 also, your other nongeneration charges including  
11 distribution and nuclear decommissioning are all  
12 subject to the proceedings at the PUC, so --

13 MR. TAVARES: Absolutely.

14 MS. EBKE: -- there will be some changes  
15 probably.

16 MR. TAVARES: Yeah, they going agree  
17 with us, in the actions that we make.

18 MR. MUREAU: Ted Mureau, Southern  
19 California Edison. Could you describe your  
20 assumption on spot market purchases?

21 MR. TAVARES: David.

22 MR. VIDAVER: Spot market purchases were  
23 assumed to be demand less QF purchases, less URG,  
24 less RPS, less firm DWR must-take contracts. The  
25 only hangup was in estimating the share of spot

1 market purchases that might be met with DWR  
2 dispatchable contracts.

3 Because the dispatchable contracts  
4 tended to be priced quite high, usually gas times  
5 11, plus about \$26, we made the simplifying  
6 assumption that dispatchable contracts would not  
7 be called upon. This over-states the energy cost  
8 somewhat, but we figured barring a virtual  
9 meltdown of the spot market on a somewhat frequent  
10 basis, that we were talking about a very very  
11 small discrepancy. So we, in terms of the total  
12 cost of generation, we might be somewhere on the  
13 order of .2 or .3 of a percent low by making this  
14 simplification.

15 And all this was done on an hourly  
16 basis. So we calculated spot market prices for  
17 8760 hours going forward ten years. And the only  
18 real simplification we made was assuming that the  
19 DWR dispatchable contracts would never be priced  
20 more cheaply than the spot market.

21 MS. JONES: Did I hear you say that you  
22 used the natural gas price forecast the staff put  
23 out to estimate the gas prices? Or did you use  
24 some other basis for --

25 MR. VIDAVER: We used the -- Bill can

1 correct me if I get the month wrong -- I believe  
2 we issued a gas price forecast August of last  
3 year. And that price forecast was --

4 MS. JONES: So that wasn't an  
5 electric --

6 MR. VIDAVER: August or September.

7 MS. JONES: That wasn't an electric  
8 generator specific number, but the more generic  
9 gas price forecast? Because we heard this morning  
10 that we looked at commercial and residential  
11 rates, but really hadn't looked at the electric  
12 generator portion.

13 MR. WOOD: This is Bill Wood, again.  
14 When we do a price forecast for natural gas we  
15 look at all sectors. We can't do one  
16 individually.

17 So we will do, in general, we determine  
18 what the price of gas is going to be delivered at  
19 the California border. And then come up with a  
20 weighted average price within each of the utility  
21 service areas, gas service areas. We add onto  
22 that then the transportation components inside the  
23 state to each of the sectors.

24 And these transportation components are  
25 based on our estimate of what their cost to

1 operate their system is going to be during the  
2 coming years. Then using a CPUC decision, we  
3 allocate those costs then to the different rate  
4 classes, talking about the operational costs, to  
5 different rate classes.

6 So therefore we can't do commercial  
7 specific forecasts. We have to do res,  
8 commercial, industrial and electric generation all  
9 together to come up with our forecast.

10 So that's basically -- the price  
11 forecast that David used are probably very, are  
12 inconsistent with those that Lynn used in her res,  
13 commercial, industrial forecast.

14 MR. TAVARES: Any more comments?  
15 Questions? If there's no comments then we're  
16 going to have our second presentation today.

17 PRESIDING MEMBER BOYD: San Diego, I  
18 notice, is caucusing outside the room somewhere,  
19 but maybe we'll have to call on them when they  
20 reappear. But I think their staff is catching  
21 them up on what was said in the room here. So I  
22 don't want San Diego to go without the opportunity  
23 to address the subject, since they gave us a  
24 fairly strongly worded letter on this subject. It  
25 would be nice to hear from them.

1 But, we'll have to move ahead with what  
2 we've got and circle back.

3 MR. TAVARES: Okay, next presentation,  
4 we're going to present the muni, municipal rates.  
5 Helen Sabet is going to talk about rates.

6 MS. SABET: Hi, my name is Helen Sabet.  
7 I'm going to be talking about the municipal  
8 utilities and how we developed that forecast.

9 The municipal utilities that the  
10 forecast -- excuse me -- the municipal utilities  
11 that the forecast is developed for are the Los  
12 Angeles Department of Water and Power, Sacramento  
13 Municipal Utility District, the City of Burbank  
14 Public Department, the City of Glendale and the  
15 Pasadena Water and Power.

16 Now, the methods are pretty much the  
17 same as the IOUs except the details are a bit  
18 different. The first step is to develop our  
19 present rates. A typical customer for each  
20 customer class is developed.

21 As Ruben talked about, we use the same  
22 chart for the average monthly consumptions as the  
23 IOUs, so this is the same thing that he presented  
24 before and talked about.

25 A rate schedule is chosen to represent a

1 customer class. Table 2 shows the rate schedules  
2 that are used. These schedules are actually  
3 different from the IOUs.

4 We use five different classifications,  
5 residential, small commercial, medium commercial,  
6 industrial and agricultural. And SMUD is the only  
7 utility that actually has an agricultural rate  
8 schedule that we use.

9 Retail rates are reviewed on the utility  
10 website for any changes. We speak to  
11 representatives of each municipal utility to  
12 verify the current tariffs. And then the  
13 municipal utility average present rates for each  
14 customer class are developed.

15 This is an example of our present rates  
16 worksheet for Los Angeles Department of Water and  
17 Power. This is for the residential  
18 classification. We used the rate schedule R1.  
19 There are several factors that go into making up  
20 the present rate. There is a monthly service  
21 charge, an energy charge, an ECA, which is an  
22 energy cost adjustment, an ESA, which is an  
23 electric subsidy adjustment.

24 And the first thing we do is we want to  
25 get a total monthly bill. We get a subtotal of

1 the energy charge, the ECA and the ESA. We times  
2 it times the consumption which is the 500 kilowatt  
3 hours a month, and then we add the monthly service  
4 charge to get the total monthly bill, \$52.18. And  
5 then we take that total monthly bill and divide it  
6 by the 500 kilowatt assumption per month to get  
7 the average revenue per kilowatt hour. In this  
8 case it's about 10 cents.

9 I also want to add that most munis do  
10 not have unbundled rates, although the year 2002  
11 Pasadena did unbundle some of its rates. They now  
12 show transmission and distribution charges in  
13 their tariff schedules, and we did use them in  
14 calculating our present rates.

15 The second step is to develop our  
16 forecast. It is assumed that, as Ruben said  
17 before, that fundamental rate structures for the  
18 five municipal utilities remain as they are today.

19 Utility websites, news articles and  
20 annual reports, financial statements, et cetera,  
21 are reviewed to identify changes in the rates, for  
22 example.

23 SMUD has one-quarter of a cent decrease  
24 in 2004. And we review any information that we  
25 can get, any inputs to our forecast. I happened

1 to pick this one up out of my utility bill when it  
2 came.

3 Next, the energy cost is estimated for  
4 each utility. In order to obtain information for  
5 this analysis we use the form EIA form 412 because  
6 we do not have access to the municipal utilities  
7 contract, such as information on their generation  
8 costs, fuel costs, et cetera. So we picked up all  
9 of our data from this particular form.

10 On the right hand of the slide you'll  
11 see a column that says costs of generation. The  
12 cost of generation is calculated by taking the  
13 costs, dividing them by the purchases. Then the  
14 weighted average cost of generation is calculated  
15 to use as a baseline in the energy cost  
16 projection.

17 At the bottom of the slide you'll see  
18 some percentages. The demand for fossil, hydro  
19 and purchase is calculated as a percentage of  
20 total purchase to use as one of the factors in  
21 developing the projected energy cost.

22 Once the baseline for energy cost is  
23 developed the energy cost is projected by  
24 adjusting it for the percentage change in gas  
25 prices, spot market prices and inflation.

1           And the middle four columns, you can see  
2       these are forecasts that are produced by our gas,  
3       demand and electricity analysis office. And we do  
4       use all of these forecasts in developing our  
5       forecast.

6           An analysis of revenue accumulation if  
7       performed by estimating the following. We  
8       estimate the operating revenues by basically  
9       taking the electricity sales times tariffs. The  
10      operating expenses are estimated by taking the  
11      electricity sales times energy cost. Then we  
12      derive the net income and accumulative, at the  
13      very right-hand column, and we look at this and we  
14      decide if there is enough accumulation of the  
15      revenues that the utilities that we're looking at  
16      can actually decrease their rate.

17          And we decided that there was enough  
18      accumulation of those revenues that we could  
19      decrease the rate by 5 percent.

20          Any other assumptions and inputs to use  
21      in developing a forecast are determined. And then  
22      the forecast is developed using all our  
23      assumptions and all of our inputs, basically what  
24      I've talked about today.

25          And this is one of the graphs that came

1 out of our report. It shows the forecast. We use  
2 the present rates as a baseline and those are the  
3 year 2002 rates which are actually not on this.  
4 And then we project it, the generation portion of  
5 the rate is adjusted by the percentage change in  
6 the energy cost; the nongeneration portion of the  
7 rate is adjusted by the percentage change in  
8 inflation.

9 And the rates are adjusted for all of  
10 our assumptions and inputs. For example, SMUD's  
11 one-quarter cent kilowatt hour decrease in 2004 is  
12 part of our forecast, as well as our revenue  
13 analysis. The 5 percent decrease is also included  
14 in our forecast, as well.

15 The results of our forecast are that  
16 municipal rates will slightly increase over the  
17 forecast period. The rates decrease 5 percent due  
18 to the excess funds for the municipal utilities  
19 that we looked at. The decrease is partially  
20 offset by the increase in energy costs and  
21 inflation. And that SMUD has a one-quarter-cent  
22 kilowatt hour decrease in 2004, also offset by the  
23 increase in energy costs and inflation.

24 Our conclusions are that municipal  
25 utilities will most likely keep their rates

1 constant during the 2003. LADWP, Glendale and  
2 Burbank could decrease their rates by 5 percent or  
3 more in 2004, and Pasadena in 2005, as a  
4 consequence of current excess accumulation of  
5 their funds.

6 And then SMUD will most likely decrease  
7 their rates by a quarter-cent kilowatt hour to  
8 offset past increases.

9 Future retail electricity rates for the  
10 five municipal utilities will depend on the cost  
11 of natural gas, energy purchased and the need to  
12 balance their rate stabilization funds.

13 I wanted to say about the 5 percent  
14 decrease, we don't have a crystal ball, we don't  
15 know that that's going to exactly take place.  
16 It's just that in our analysis we felt that that  
17 is a possibility.

18 I mean, rates could stay the same, go  
19 up, decrease less, decrease more.

20 And that's it. Any questions or -- I  
21 don't have any panel members, so if there are any  
22 people here from the municipal utilities that  
23 would like to come up and participate?

24 MR. JORDAN: Thank you, Mr. Chairman and  
25 Members, Jerry Jordan with the California

1       Municipal Utilities Association.

2               I'm not here to talk about any  
3       assumptions that went into that. I don't have  
4       enough information. And frankly, I don't think  
5       the Energy Commission does, either.

6               I think the one thing that we can  
7       properly predict about long-range rate forecasts  
8       is that they're somewhere below reliability of  
9       long-range weather forecasts.

10              Now, I'm not sure what this exercise,  
11       what function it performs. We've already seen  
12       this, as you may know from the letter that I sent  
13       you, Mr. Chairman, this used for political  
14       purposes by the Edison Electric Institute, the  
15       fact that you are predicting something about rates  
16       which probably nobody knows anything about.

17              In addition, when I read the legislation  
18       it talks about developing price forecasts. It  
19       does not talk about developing disaggregated  
20       utility-by-utility rate forecasts. And I can see  
21       an instance for instance, let's say that the  
22       Energy Commission forecast predicts rates that are  
23       too high for everybody in California; the  
24       investor-owned utilities as well as the municipal  
25       utilities.

1           And now businesses that might want to  
2     locate to California are making their decision to  
3     go somewhere else based upon an electricity rate  
4     forecast, not a price forecast. I think you can  
5     probably do a good job of predicting what gas  
6     prices and what wholesale electricity prices might  
7     be. But as soon as you start breaking that down  
8     into a utility-by-utility specific rate, it's way  
9     too complicated.

10           I don't know if you've looked at some of  
11    the rate comparisons that Los Angeles puts out,  
12    existing rates. Those are very difficult to get  
13    apples-and-apples with just from existing rate  
14    structures. I don't know either how you can do it  
15    for a long-term rate forecast, or really what  
16    purpose you're serving in doing that.

17           CHAIRMAN KEESE: Does staff care to  
18    answer that question?

19           What we heard before and what  
20    Commissioner Boyd and I have heard in our  
21    different meetings, as we go through these  
22    iterations, is that you really can't look at gas  
23    prices until you look at demand. And as soon as  
24    you look at demand and set prices, you've adjusted  
25    demand.

1           So there is a certain bouncing ball that  
2       takes place here. You need to do each of the  
3       components, and then it adjusts your assumptions,  
4       which takes you back and that adjusts your  
5       assumptions coming in again. And you eventually  
6       wind up leveling out at some kind of a line.

7           But, as you saw with the other  
8       utilities, if we're going to come up with  
9       recommendations on the efficacy of renewables, of  
10      energy efficiency, of demand response, we're going  
11      to have to be suggesting what the costs are going  
12      to be out there.

13           MR. JORDAN: Mr. Chairman, maybe I  
14      wasn't very clear. I don't have an objection with  
15      you forecasting what the costs are going to be,  
16      what the wholesale price of electricity will be.  
17      I can see the connection.

18           When you start breaking it down by  
19      utility, however, you start creating a lot of  
20      concern about what your forecast is for a specific  
21      utility. And now you're talking about a whole  
22      bunch of different, you know, we saw 500 kilowatt  
23      hours chosen as a benchmark. Hardly any rate  
24      schedule in the state breaks at 500 kilowatt  
25      hours. They break all over the place.

1           So, you're not comparing the same thing  
2           to the same thing. And I think the potential  
3           danger of having forecasted electricity rates by  
4           utility-specific basis can be very harmful to  
5           local efforts for business development and those  
6           sorts of things.

7           CHAIRMAN KEESE: You're raising good  
8           issues. I guess I would ask the question of  
9           staff, I believe you indicated you felt that  
10          municipal utility rates would stay about the same,  
11          constant? Is that what I heard you end with?

12          MS. SABET: For the year 2003.

13          CHAIRMAN KEESE: And going forward?

14          MS. SABET: They're going to slightly  
15          increase in our forecast.

16          CHAIRMAN KEESE: What are you predicting  
17          for the IOUs?

18          MR. TAVARES: Well, for the IOUs we're  
19          predicting that again they're going to go down in  
20          2004.

21          But going back to the question of  
22          whether or not, you know, those rates are  
23          inaccurate. Yes, they are. We know that. But,  
24          again, these rates are used for as an input to our  
25          demand forecast, as an input to some of the other

1 deliverables that the Energy Commission has to do.

2 We would love to work with the munis,  
3 you know, to develop more accurate forecasts and  
4 include, you know, present rates and the  
5 characteristics of a typical consumer.

6 We know, for instance, Sacramento  
7 Municipal Utility District, a typical customer, a  
8 residential typical customer is over 600 kWh per  
9 month. It's true in the L.A. area, southern  
10 California, Glendale, Pasadena and Burbank  
11 probably is less than 500 kWh.

12 So, we just took the middle road. And  
13 again, we would love to work with the munis to see  
14 what their assumptions are, to develop a better  
15 forecast.

16 PRESIDING MEMBER BOYD: I appreciate  
17 what Mr. Jordan said when it comes to economic  
18 planning and region shopping for price and what-  
19 have-you. So, this is something we're going to  
20 have to talk about, internally, as to what we need  
21 to meet our needs and our obligations to the  
22 Governor and the Legislature, vis-a-vis the issue  
23 of publishing data predicated on averages that  
24 could cause people to region shop mistakenly for  
25 electricity rates.

1           It's a good point. I'm not quite sure  
2           at the moment what we do about it, but it's a good  
3           point.

4           MR. TAVARES: Yeah, and we agree that  
5           again they are very different. However, I would  
6           like to see the municipals to discuss, you know,  
7           current rates, where they are today. Whether we  
8           agree on what we have in our forecast as a basis,  
9           and whether they agree to what we have and what  
10          they have.

11          Once we agree on that then it's a  
12          possibility that we can agree on some of the other  
13          parameters that we consider in forecasting the  
14          future.

15          MR. SKOWRONSKI: From a regulatory  
16          standpoint, Commission standpoint, the formation  
17          of RTOs. Munis, by and large, aren't part of the  
18          RTOs. I guess the IOUs will be part of the RTOs.  
19          But with respect to transmission wheeling not only  
20          inside the state, but the possibility of  
21          additional imports because of RTO establishment,  
22          has this been taken into account in the rate  
23          structures in the forecast? And if so, how?

24          MR. TAVARES: The answer is no, we  
25          haven't taken it yet. Again, this is the first

1 scenario that we have, and again there are going  
2 to be many scenarios probably that we do consider.  
3 We'll see how we can consider some of those  
4 factors.

5 MR. CODINA: Hi, I'm Rick Codina. I'm  
6 with the Sacramento Municipal Utility District.  
7 And I will agree somewhat with the earlier speaker  
8 about the projections on future rates. Although  
9 I'm not really prepared to speak about them very  
10 much, but they do seem a bit foreign to us, since  
11 they presume a sort of a pass-through of the  
12 increases that you're seeing in your assumptions.  
13 And we just don't do ratemaking that way. There's  
14 a lot of other considerations. And we're not  
15 planning any rate increases for a number of years.  
16 So they do seem a bit foreign to us.

17 But I did want to address a few of the  
18 assumptions that are being made by the baseline,  
19 the 2003. And specifically in response to the  
20 questions that you had, that you suggested that we  
21 respond to.

22 And I think first off, yes, the typical  
23 customer doesn't really apply in terms of the  
24 residential for the SMUD area, as you suggested  
25 earlier. Our average use is 720 kilowatt hours,

1 and that's about 44 percent higher than the 500  
2 kilowatt hours that you assume to be the typical  
3 throughout the state.

4 The percentages, and I'll present you  
5 with this information later, but the percentages  
6 for the other customer classes also vary.  
7 Agriculture in our service area is much smaller.  
8 We use as our -- we also have small pumps, quite a  
9 number of small pumps, so we consider them  
10 agricultural customers. So our agricultural  
11 customer tends to be much smaller than the one  
12 that you assume.

13 I think when you're looking at time of  
14 use rates, the size of the typical customer  
15 doesn't matter as much in terms of determining an  
16 average price of cents per kilowatt hour, as long  
17 as the load shapes are fairly close to what is  
18 typical. Since you can scale them up and down.  
19 And you know, our rate structure, in particular,  
20 energy is the largest share of the cost, so it  
21 almost doesn't matter what size.

22 Now, in terms of average bills, which is  
23 what the NRDC was talking about, of course it will  
24 affect the average bill. But even though there  
25 was some discrepancy with the time of use rates,

1 the price, after we evaluated the average price,  
2 they were fairly close.

3 Now question number two is can you look  
4 at one particular rate schedule and sort of use it  
5 as a proxy to represent an entire customer class.  
6 And the answer, from what we can tell, looking at  
7 the information you're using for 2003, that  
8 they're pretty close for the time of use. But  
9 residential is way off. And it was about 13  
10 percent off. You're projecting 8.9 cents, and  
11 we've over 10 cents for our average residential  
12 customer.

13 And I think where the problem comes in  
14 with the residential is because it's a tiered rate  
15 structure; and the more usage that you have, the  
16 higher the customer will be paying. And if you're  
17 using a fixed amount, you're tending to only  
18 include the cost the customer is paying on tier  
19 one. And this is really going to understate the  
20 actual average price for all the customers,  
21 because a significant portion of the revenue in  
22 the SMUD area, over 25 percent comes from the tier  
23 one and tier two. Because even if the usage is  
24 not very high in those tiers, the price is so high  
25 that it does bring in a lot more revenue per kWh.

1           So my suggestion would be that when  
2       you're coming up with a typical customer that you  
3       don't use a fixed amount, but that you somehow  
4       distribute that you allocated across all the  
5       tiers. And you find some way of distributing it  
6       so that you can represent all the prices at the  
7       three tiers to come up with, represent an average  
8       price or an average bill for that customer.

9           And I think the way you're doing it now  
10      doesn't really truly represent the way most of the  
11      tier structures are set up.

12          Well, I did have some questions about  
13      how you were using your multipliers for the future  
14      costs in particular. Our utility is in the  
15      process of building plant. We have 500 megawatts  
16      that are probably going to come online, and  
17      another perhaps after that. And I was wondering  
18      how you took into account future planned  
19      construction of plant.

20          MR. TAVARES: Actually we would love to  
21      have all of that information. We don't have it.  
22      We -- consider those, you know, those kind of  
23      factors, but again, you know, we are willing to  
24      accept any information that you can provide us for  
25      the next round.

1           MR. KLOBERDANZ: I don't see anybody  
2 else walking up, so I'll take a moment, if you  
3 will. I am not representing a municipal utility.  
4 I'm Joe Klobberdanz, San Diego Gas and Electric.

5           Three brief remarks, if I might. And  
6 thanks for taking me out of order, I appreciate  
7 that.

8           First of all I would encourage the  
9 Commission and staff to just be aware that  
10 sometimes the issuance of a draft report can have,  
11 I presume, unintended consequences in local media,  
12 local press and with customers' understanding of  
13 what's true and what maybe isn't quite right.

14          In fairness, you put draft all over that  
15 report, and that's good. But just please be aware  
16 that as these kinds of things roll on unintended  
17 results can happen in terms of what people  
18 understand or think they understand.

19          So, I appreciate your having that in  
20 mind. I don't have an easy answer. You've heard  
21 a lot about that this afternoon and I won't beat  
22 that to death any further. Thanks for hearing  
23 that part.

24          Secondly, the company doesn't do ten-  
25 year price forecasts anywhere near the precision

1       that you call a price forecast, as staff is  
2       attempting to do here. And so we don't have  
3       anything to compare it to.

4               We have offered some comments, ten or so  
5       thoughts, on things you can do to make the  
6       forecast more accurate. We encourage you to take  
7       these to heart. And we would also make ourselves  
8       available by phone on short notice, if necessary,  
9       to help you understand these points, or any others  
10      that feed into what you're trying to do here. We  
11      intend to be of help, as appropriate.

12             One last thought, if I might. It occurs  
13      to me that the Commission and the staff have been  
14      asked to do something here that is difficult,  
15      complex and it's a lot of work to be done in the  
16      time allowed.

17             I'd like to make two observations about  
18      that. First of all, let me tell you I didn't feel  
19      this way when the draft came out and we were  
20      getting all the media in San Diego. But on  
21      reflection, let me say two things about that  
22      effort that staff is making, in particular, under  
23      rather trying times in the fiscal history of this  
24      state. Thank you, and be proud of what you're  
25      doing.

1                   Thanks.

2                   MR. TAVARES: You are my friend.

3                   CHAIRMAN KEESE: Let me -- I think this  
4                   is -- let me make a little statement here about  
5                   the difficulty of what we're trying to do.  
6                   Because you focused on what the Energy Commission  
7                   is trying to do.

8                   I've looked at a number of issues as we  
9                   think of what the end game is to this process.  
10                  And one of the subjects I've picked up on is  
11                  demand response. And I looked at FERC, the  
12                  Federal Energy Commission, and they have a demand  
13                  response program based on their regulation of  
14                  wholesale rates, so it involves wholesale trading  
15                  of demand response.

16                  And I've looked at the Public Utilities  
17                  Commission, and they have a demand response  
18                  program based on their ability to adjust retail  
19                  rates.

20                  And I look at the Power Authority, who  
21                  we haven't heard from today, and they look at  
22                  demand response, trying to figure out how they can  
23                  loan money to assist demand response.

24                  And I look at the ISO and they have a  
25                  demand response program based on their need to run

1 the system.

2 And I look at the Energy Commission and  
3 we do a theoretical -- we don't have any clubs or  
4 carrots -- we looked at demand response. The  
5 result of which is it is not a surprise to me that  
6 we have unaligned demand response programs and  
7 philosophies around the state and the country.

8 So, what I hope this process will do is  
9 not be the Energy Commission coming up with a  
10 report for the Governor. I would like to see  
11 everybody who has spoken today be a part of what  
12 comes out of here. I'm willing to accept our role  
13 as the scribe. We'll put it together, we'll do  
14 the basic research and I thank you for  
15 congratulating our staff. I think they have done  
16 a good job.

17 But, the end game has got to be that  
18 we've all bought into the base here, and we all  
19 feel reasonably confident that we did as good a  
20 job of setting the base as we can. And then that  
21 we all agree, as best we can, on what policies we  
22 should have thereafter.

23 And if we can come up with it -- I'll go  
24 back to my demand response -- if we can come up  
25 with a demand response philosophy, theory, idea,

1 vision, then all of the agencies, at least in  
2 California -- we can't control FERC -- at least  
3 all the agencies in California can attempt to  
4 align with that.

5           You may know that we're, on the side,  
6 trying to do that among our agencies right now.  
7 We're trying to align our processes, not our  
8 policies, but our processes so we can face these  
9 issues together. This is a perfect format, it  
10 seems to me, for us to work together. And I hope  
11 we don't perceive this as an Energy Commission  
12 product. It's got to be a product of everybody in  
13 this room.

14           Sorry for the speech.

15           PRESIDING MEMBER BOYD: No, well put,  
16 Chairman Keese. I mean it is an integrated energy  
17 policy report, and I think you hit the nail on the  
18 head. One of the concerns, I was beginning to  
19 accumulate here in the last hour or so, is some  
20 kind of a swiss cheese map of the State of  
21 California, where we have knowledge in some areas  
22 and voids in the others.

23           So I think hopefully as a result of  
24 today's discussion we've heard a lot of people  
25 volunteer a willingness to work with the staff.

1 And I know the staff will take folks up on that  
2 and try to give us a statewide picture.

3 One must realize the absolute  
4 frustration of the citizens of the state reflected  
5 to the Legislature who represent them, in trying  
6 to understand what happened in the not-so-distant  
7 past, and assure our collective selves that we  
8 don't get ourselves into that dilemma ever again.

9 So, we are going to need to paint the  
10 most complete picture possible. We are going to  
11 need the cooperation of folks. We don't want to  
12 mislead people or to give bad advice. I  
13 appreciate the dilemma of perhaps the media's  
14 interpretation of some stuff. It can't be helped  
15 in a public society. And where you stamp draft  
16 all over it and do the best you can, but  
17 hopefully, you know, we can work with each other  
18 to put out those kinds of fires quickly if they're  
19 inadvertently started.

20 But we are going to need the cooperation  
21 of everybody to have a totally integrated picture  
22 of what the State of California looks like, so the  
23 citizens and their Legislature and the  
24 Administration can have some assurance that either  
25 a) things are looking pretty good, or b) some

1 additional actions have to be taken by the  
2 collective to see that we don't have a problem; to  
3 see that the California economy is kept whole and  
4 viable and competitive with those other reaches of  
5 the country that you compete with in the cost of  
6 doing business. And this is a significant cost of  
7 doing business.

8 So, I'm pleased with what we've seen  
9 here today. I think we've recognized a lot of  
10 areas where more work needs to be done. Once  
11 again, we've emphasized the need to have to work  
12 together. And let's hope it happens.

13 Now, is there anyone else that wanted to  
14 say anything else? Did we leave anybody out, any  
15 subject uncovered? I appreciate the gentleman  
16 from San Diego looping back in, because that's  
17 what we had said earlier. Hope we didn't cut off  
18 anybody who wanted to talk about the municipal  
19 report we just finished.

20 So I'll throw the floor open once again.

21 Staff, any further comments?

22 MR. TAVARES: Just one last comment. We  
23 are entirely open. We can discuss anytime, just  
24 give us a call. We can show you our work. We can  
25 go point by point in our spreadsheets, whatever we

1 did we are -- and we hope that you are, too. So,  
2 that's it.

3 PRESIDING MEMBER BOYD: And we can  
4 protect confidentiality in the interests of  
5 getting answers on a broader basis. But, thank  
6 you.

7 Well, thank you, everybody. Appreciate  
8 this. Hope it is the first in a series of many.  
9 And hope we can be informal. Come back tomorrow  
10 prepared to talk in even greater detail.

11 CHAIRMAN KEESE: Thank you.

12 (Whereupon, at 2:48 p.m., the workshop  
13 was adjourned, to reconvene at 10:00  
14 a.m., Wednesday, February 26, 2003, at  
15 this same location.)

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## CERTIFICATE OF REPORTER

I, VALORIE PHILLIPS, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Workshop; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said workshop, nor in any way interested in outcome of said workshop.

IN WITNESS WHEREOF, I have hereunto set my hand this 26th day of March, 2003.

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